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There are two
L.B. abbreviations.
Mark the L.B. in the
7th column

L B 1901



CATALOGUE

— OF —

SEEDS

Bee and Poultry Supplies

STOCK FOODS

AND

FERTILIZERS

*** SEEDS ***

LILLY, BOGARDUS & CO., Inc.

SEATTLE, WASH.



GENERAL INSTRUCTIONS

...FOR...

ORDERING BY MAIL.

What We Do

WE TAKE THE RISK—We guarantee that all money sent us by Postoffice or Express Companies, Money Order, Bank Drafts, Bills, or Coin by Registered Letter, will reach us. We will not be responsible for Coin sent in an ordinary letter, nor for postage stamps.

FREE BY MAIL—We send SEEDS free by mail at the prices named in this Catalogue, except those varieties mentioned. Some orders we can send by express as cheaply as by mail, and if they are large we do so prepaid and will notify the customer.

BY EXPRESS—If goods are ordered sent by Express we cannot always prepay the charges, but will send enough extra goods to more than pay the charges.

WE GUARANTEE—That every package sent out by us will reach the purchaser in good condition, and that everything is exactly as ordered. If any package is lost we will send again.

WE PACK—All orders carefully, in a manner to insure their safe transit through the mails to any part of the country.

WE FILL—All orders as promptly as possible, and when any stock is not to be had, we will notify the purchaser, and if nothing else will do we will cheerfully refund the money.

What Buyers Should Do

FORWARD MONEY—With order by Postoffice Order, Express Order, Bank Draft or by Registered Letter. Postoffice Orders are much the cheapest and safest way, and nearly all offices issue them.

STAMPS—Please do not send Stamps in payment for order if it can be avoided, as they often become damp in transit and stick together or stick to the order, which often results in the destruction of both.

GOLD OR SILVER—If sent in a letter should be very carefully wrapped in strong paper. We cannot be responsible for coin sent in letter unless the letter is registered.

BE SURE—To write your name and address VERY plainly, and keep a copy of your order that you may know when your package arrives that all is correct.

PLEASE WRITE—Your order plainly and distinctly by itself, and not mixed up with anything else you may wish to say. Always carry out the price and add up the total, then deduct the discount as per our offer below.

ORDER EARLY—We try to fill all orders on the day they are received, but this is often made impossible by a rush of business, so don't wait until you are ready to plant before ordering.



••DISCOUNTS••

We make the following discounts to those who will get up club orders or order largely for their own use:

Considering our very low prices we think this is a very liberal offer, and it will surely pay anyone for the trouble of forming a club.

With any order amounting to \$1.00 you may order goods amounting to	\$ 1 10
" " " 2.00 " " " "	2 25
" " " 4.00 " " " "	4 60
" " " 5.00 " " " "	5 75
" " " 6.00 " " " "	7 00
" " " 10.00 " " " "	12 00
" " " 25.00 " " " "	30 00
" " " 100.00 " " " "	125 00

These Discounts Apply Only to Orders for Garden Seeds

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Annual Catalogue

1901

Seeds
Poultry and Bee
Supplies
Stock Foods

Our 1901 Catalogue. In presenting this Catalogue of Seeds, we wish to call your attention to a few important facts which are worthy of your consideration. Seeds of the best quality will often fail through improper treatment. Thus, if a small seed be sown so deeply that the young plant cannot reach the surface, the seed, however good, will fail. More failures result from a want of proper knowledge of conditions necessary to germination than from bad quality of seeds themselves. These conditions are: a proper temperature, sufficient moisture, free access of air; besides these, the soil must be in proper condition, and present no physical obstacle to the growth of the young plant.

Something to Remember. If heavy rains have compacted the surface of the soil, and the sun has baked it to a hard crust, it will be impossible, even if all other conditions are favorable, for the seedling plants to force their way through it, and many perish from this cause alone. Seeds differ greatly as to the temperature required for germination. Beets, Cress, Pease, etc., germinate readily at a temperature of 45 degrees; but if Melons and other seeds of that family, Bush or Pole Beans, and other plants of sub-tropical origin, are sown under the same conditions they will be apt to decay, as for their prompt germination they require a heat of at least 60 degrees. For this reason many seeds fail yearly from too early sowing. The second condition, proper moisture, is likely to be violated by an excess rather than by too little moisture. The proper amount is that which a well-drained soil will naturally hold. Free access of air is all-important, and this is interfered with by an excess of water in the soil. In germination complex chemical changes take place in the seeds, in which the air performs an important part. A portion of the seed is consumed, carbonic acid gas being given off in changing the starch and other constituents of the seed into nutriment to forward the growth of the germ or embryo plant, which depends upon the contents of the seed until it has formed roots below-ground and leaves above, and is able to sustain itself. Besides these conditions, affecting the germination of the seed, the young plants, after they have made their way to the surface, are liable to various accidents; a sudden current of very cold air, or a continuous drying wind, may check their growth, or destroy the young plants altogether.

More to Contend With. In addition, there are numerous insects, both below and above ground, that may attack the plants, some of these being so small that they often destroy a crop before they are discovered. We may also mention the well-known tendency of many vegetables to revert to their original types, notwithstanding the care of the seed-grower; the yellow-podded wax beans becoming green, the yellow and white celery becoming more or less green, dwarf pease becoming running sorts, etc., etc.

Notice. While we use the greatest possible care to obtain the purest and most reliable seeds, *we can give no warranty, expressed or implied, as to the description, quality or productiveness of any seeds, bulbs or plants we send out and will not be in any way responsible for the crop.* If the purchaser does not accept the goods on these terms they are to be at once returned.

We shall be gratified to receive any orders you may send us, large or small, and shall give them our prompt and most careful attention.

Yours truly,

LILLY, BOGARDUS & CO. Inc.

THE ESSENTIALS FOR A GOOD VEGETABLE GARDEN

PREPARATION OF THE GROUND

care if it is a clay soil that the work is not done when it is too wet. If a handful from the bottom of the furrow crumbles slightly, press it into a ball which cannot be easily crumbled into fine earth again, the soil is too wet, and if plowed then will be hard to work all summer. The surface should be made as fine and smooth as possible with the harrow or rake. It is generally necessary to turn the soil over more than at once, and to do this in time for the earliest crops; but the part which is not planted for some weeks should be kept mellow by frequent cultivation. This is accomplished by turning the soil over by the use of trenching, that is, spading two feet deep in successive rows, and then turning the surface soil on top. This is accomplished by digging a trench two feet wide across one side, and a second one adjoining and parallel with the first one on the opposite side, and then turning the soil over then thrown into the first and covered with the surface soil from a third trench; the balance of the third is then thrown into the second and covered with the surface of the fourth; and so on until all is worked over, when the soil from the first trench is thrown into the last. This is quite expensive, but often changes a soil where nothing can be grown into one producing the finest vegetables, and its effects last for several years.

SOWING THE SEED

There is no more prolific source of disappointment and failure among amateur gardeners than hasty, careless or improper sowing of the seed. A seed consists of a minute embryo, the roots, with a sufficient amount of food stored in or around it to sustain it until it can expand its leaves, form roots, and provide for itself. It is generally a very delicate thing, more or less impervious shell. To secure germination, moisture, heat and a certain amount of air are necessary. The first steps are the softening of the hard outer shell, the developing of the leaves of the plant from the water stored in the seed, and the developing of the food from the form of starch to that of sugar. In the first condition the food was easily preserved unchanged, but the plant, with its undeveloped leaves and no roots, was incapable of using it, while in its sugary condition it is easily appropriated, and it is then that the seed decays itself and induces decay in the plant. A seed, then, may retain its vitality and remain unchanged for years, while after germination has commenced a check of a day or two in the process may be fatal. Therefore, from the time the seed is sown, the gardener should treat the parent plant until it in turn produces seed when the plant is so susceptible of fatal injury from the overabundance or from the want of sufficient heat and moisture and between germination and the formation of the first true leaves, and is so delicate, then that it needs the care of a gardener to secure favorable conditions. These are:

First—A proper and constant degree of moisture without being roiled with water. This is secured by sowing the seed in a loose, well-dug soil so fine and the pressing of the soil over the seeds so firmly with the feet or the back of the hoe that the degree of moisture remains as nearly uniform as possible.

Second—A proper degree of heat, secured by sowing the seed when the temperature of the soil is at that most favorable to germination. Too high a temperature is as detrimental to some kinds as one too low is to others. The proper temperature for each sort may be learned from the careful following of the seasons and the experiences of the most successful gardeners in your vicinity.

Third—Covering the seed to such a depth that while a uniform degree of heat and moisture is preserved, the necessary air can reach the seed, and the soil is not too dry. This is accomplished by covering the seed with the light and air. This depth will vary with different seeds and conditions of the soil, and can be learned only from practical experience. In general, seeds of the size of the turnip should be covered with an inch of earth pressed down, while corn may be an inch, beans an inch to two inches, and peas two to six inches deep.

Fourth—Such condition of the soil that the ascending stem can easily penetrate it, and the young plant can get up without hindrance. We can usually secure this by thorough preparation of the ground, and taking care never to sow fine seed when the ground is wet. Occasionally a heavy or long continued rain followed by a bright sun will bake the surface of the soil, and if it is very dry, it will be necessary to young plant to find its way through it, or a few days of strong wind will so dry the surface that no seed can germinate. In such cases the only remedy is to plant again.

CULTIVATION

as it is dry enough to permit it to be done. The more the soil is stirred while the plants are young the better, but as they develop and the roots occupy the ground, cultivation should be shallower. The best becomes more and more shallow, until it is only a few inches deep. In the case of vegetables where the yield and quality has been materially lowered by injudiciously deep and close cultivation after the roots of the plants had fully occupied the ground.

For early crops, some provision for starting certain plants earlier than can be done in the open air is necessary; for this purpose nothing is better and its construction is simple. We can usually secure this by a hot-bed, and taking care never to sow fine seed when the ground is wet. Occasionally a heavy or long continued rain followed by a bright sun will bake the surface of the soil, and if it is very dry, it will be necessary to young plant to find its way through it, or a few days of strong wind will so dry the surface that no seed can germinate. In such cases the only remedy is to plant again.

HOT BEDS

ter than a good hot-bed, and the expense so light that every garden should have one. A hot-bed proper not only protects the plants from the cold, but supplies bottom heat. By this term the gardener means that the soil is constantly kept at a higher degree of warmth than the outside air, and in the condition so far as heat is concerned, which is most favorable for rapid and vigorous growth. It is evident that to produce this we must have some heat source, and that it is well to have it covered up, done by making a compact pile of some fermenting material, and covering it with the earth in which the plants are to grow.

HEATING MATERIAL.—The best heating material that is easily available is the refuse of the household, such as manure, straw, or leaves. Such manure, if thrown into a loose pile, will heat violently and unevenly and will soon become cold. What is wanted in the hot-bed is a steady and moderate heat, lasting long. To secure this the manure should be covered up, and if it is to be used for a long time, stand a few days, and then be forked over again, piled and allowed to heat a second time, when, after a few days more, it will be ready for use. The object of the repeated forking over and piling is to get the whole mass of uniform degree of fermentation.

SASH.—Gardeners commonly use sash made especially for hot-beds and glazed with small lights cut from odds and ends and

so furnished at very low rates. Such sash can usually be procured in any of our large cities, and cost much less than it would to order. For garden use, however, we much prefer a small size that can be easily handled, and the use of larger and better glass. We would recommend that the sash be made of five feet, and that the glass be not less than ten by fourteen, and with no more than one-quarter inch lap. In giving the order to one unaccustomed to the work it would be well to state what they are to be used for, and that they be made to open and close easily.

THE FRAME.—This may be made of sound one-inch lumber, the back twelve to fourteen inches high, the front ten to twelve. It should be made to open and close easily, and the sash, so as to leave as little opening as possible, and yet allow the sash to be easily slid up and down, even when the frame is quite wet.

THE SOIL.—This should be light, rich, friable. Any considerable amount of clay is highly objectionable. If possible it should be made quite dry and unfrozen when the sash is put on, and it is much better to prepare it the fall before and cover the pile with enough coarse manure or straw to keep out the frost.

MAKING THE BED.—This requires careful attention, as future success depends largely on the manner in which this work is done. Having cleared away all snow and ice, build a rectangular bed one foot larger each way than the frame to be used, carefully making out and spreading each forkful, and repeatedly treading down the manure so as to make it as uniform as possible in solidity, composition and moisture. It is of the utmost importance that this shaking apart and evenly pressing down of the manure should be carefully and thoroughly done; unless this is done the portion will heat unevenly, and the soil will be unevenly, making it impossible to raise good plants. The proper depth of the bed will vary with the climate, season and the kind of plants to be raised. In the shallow bed will give a quick, sharp and soon subside; a deeper one, if well made, will give a more steady and but continue much longer. For general purposes, a bed one and a half to two feet deep will be the best.

The covering of the bed with sash may be put on, and fresh manure carefully packed around the outside to the very top. (If the weather is at all severe this outside banking should be replenished as it settles.) The bed should then be allowed to stand with the sash pulled up, and the soil to settle, and the bed to be covered with a two-pass off. The earth should then be put on and carefully leveled. Care should be taken that the soil is dry and friable. If wet or frozen soil must be used it should be placed in small piles until well dried out, and then spread over the bed. The soil should be quite uniform, rising to 120 degrees, but it soon subsides, and when it recedes to 90 degrees the seed may be planted. The importance of using dry soil and allowing the first rays of heat to pass off is very great. Every season thousands of hot-beds fail of good results from these causes, and seedsmen are blamed for failure resulting from overheating or wet and soggy soil.

MANAGEMENT OF THE BED.—The conditions for success are a steady uniform degree of heat and moisture, keeping the soil at all times a few degrees warmer than the air, and the careful "hardening off" (by exposure to the air and diminishing the supply of water) of the plants before transplanting into the open air. Simple as these things are, they are not so easily done, and it is often the case that the most prominent among which are overheating the air under a bright sun. Without experience one would scarcely believe how quickly the temperature of the soil will build up, and how quickly the air will rise up on still, sunny days, even when the temperature outside is far below freezing, or how quickly the temperature will fall to that outside if upon a windy, cloudy day the sash is left open ever so little. These sudden rises and falls of temperature are very injurious to the plants, and the same temperature when the air is still. Again, a bed will go several days without watering when kept closed during cloudy weather, but will dry up in an hour when open on a sunny day. It is very difficult to get a uniform degree of moisture, by experience, but may easily be acquired by one who gives the matter careful attention, keeping constantly in mind the essentials given above.

A COLD FRAME

is a simple construction of boards for wintering Cabbage, Lettuce, Cauliflower, Broccoli, etc., for planting out early in the spring.

Select a dry, southern exposure; form a frame about four feet wide and as long as required. The back should be fourteen, and the front six inches high, with a cross-lie every three feet. Seeds of the above named vegetables may be sown in the frame as early as the soil will be ready to plant in cold frames about the last of October. The soil should be well prepared and smoothly raked before planting. Admit air freely on pleasant days, but keep closed in severe weather. These cold frames are very useful, and may be made in a regular covered more cheaply with cloth shades than by sash. The shades are made as follows: Make light but strong wooden frames to fit over the bed, and of a width to receive some common brand of cotton cloth, and immediately after the cloth is cut, coat it with oil, and securely tacked to the frames. Coating the cloth with oil, as is sometimes recommended, we find is of no advantage, but we have found that Plant Bed Cloth is superior to ordinary cloth for this purpose.

TRANS-PLANTING

In transplanting, the main points to be regarded are: Care in taking up the plants so as to avoid injury to the roots; planting firmly as to enable the plant to take secure hold of the soil; reducing the top to prevent evaporation, and shading to prevent the hot sun hot-bed, harden the plants by letting them get quite dry a day or two before, but give an abundance of water a few hours before they are taken out. It is most apt to be successful if done just at evening, and immediately after a rain, and the worst time being just after a rain, when the ground being wet it is impossible to sufficiently press it about the plant without its baking hard. If water is used at all, it should be used freely, and the weeds immediately covered with cloth.

WATERING.—The best time to water plants is at sunrise or just at evening. Water may be given to the roots at any time, but should never be sprinkled over the leaves, as it will make them dry and cover them with brown spots wherever it touches. If watering a plant has been commenced, keep on until the necessity ceases, or more injury than good will result from it; one copious watering is better than frequent ones. It is better to water the plants as soon as the ground becomes sufficiently dry.

REFERENCE TABLES

Quantity of Seed Requisite to Produce a Given Number of Plants and Sow an Acre

Quantity per acre.		Quantity per acre.		Quantity per acre.		Quantity per acre.	
Artichoke, 1 oz. to 500 plants.....	6 oz.	Clover, Lucerne, Large Red and	8 bu.	Grass, Blue, English.....	1 bu.	Peas, garden, 1 pint to 100 ft. of	2 bu.
Asparagus, 1 oz. to 800 plants.....	1 lb.	Corn, crimson, Dwarf.....	8 bu.	Grass, Hungarian and Millet.....	1 bu.	Peas, field, 1 oz. to 15,000 plants.....	3 bu.
Asparagus Roots.....	7250	Clover, Medium.....	10 bu.	Hemp.....	1/2 bu.	Pepper, 1 oz. to 100 hills.....	3 bu.
Barley.....	2750	Collards, 1 oz. to 5,000 plants.....	2 oz.	Kale, 1 oz. to 5,000 plants.....	2 oz.	Pumpkin, 1/2 qt. to 100 hills.....	4 bu.
Beans, dwarf, 1/2 pta. to 100 hills.....	1 bu.	Corn, sweet, 3/4 pt. to 100 hills.....	5 qts.	Kohl Rabi, 1/2 oz. to 100 ft. of drill.....	4 lbs.	Radish, 1/2 oz. to 100 ft. of drill, 10 to	1 bu.
Beans, pole, 1/2 pta. to 100 hills.....	1/2 bu.	Cress, 1/2 oz. to 100 feet of drill.....	12 lbs.	Lettsue, 1/2 oz. to 100 feet of drill.....	3 lbs.	Salisbury, 1/2 oz. to 100 feet of drill.....	8 lbs.
Beet, garden, 1 oz. to 100 ft. of drill.....	1 bu.	Cucumber, 1 oz. to 100 hills.....	1 to 2	Martynia, 1/2 oz. to 100 feet of drill.....	1 to 2	Spinage, 1/2 oz. to 100 feet of drill.....	8 lbs.
Beet, Mangel, 1 oz. to 100 feet of drill.....	5	Egg Plant, 1 oz. to 2,000 plants.....	1 bu.	Melon, Musk, 1 oz. to 100 hills.....	1 to 2	Squash, 1/2 oz. to 100 hills.....	1 1/2 bu.
Broccoli, 1 oz. to 5,000 plants.....	2 oz.	Beds, Plant, 1 oz. to 100 feet of drill.....	4 1/2 lbs.	Nasturtium, 2 oz. to 100 ft. of drill.....	15	Summer Savory.....	4 lb.
Broom Corn.....	1000	Garlic, bulbs, 1 lb. to 10 ft. of drill.....	2	Onion Seed, 1/2 oz. to 100 feet of	4 to 6	Sunflower.....	3 lbs.
Brussels Sprouts, 1 oz. to 5,000	2	Garlic, 2 oz. to 100 hills.....	5 bu.	Onion Sets, 1 qt. to 40 ft. of drill.....	8	Squash, Winter, 8 oz. to 100 hills.....	2 oz.
Cabbage, 1 oz. to 5,000 plants.....	2 oz.	Grass, Orchard, Perennial, Rye,	2 bu.	Parsley, 1/2 oz. to 100 feet of drill.....	3	Tomato, 1 oz. to 4,500 plants.....	1 lb.
Carrot, 1/2 oz. to 100 ft. of drill.....	2 1/2 lbs.	Red Top, Fowl Meadow and	2 bu.	Parsley, 1/2 oz. to 100 feet of drill.....	3	Turnip, 1 oz. to 250 feet of drill.....	1 1/2 bu.
Cauliflower, 1 oz. to 100 ft. of drill.....	2 1/2	Grass, Red Top, Fencer Clean, 8 to	10			Vetches.....	2 bu.
Celery, 1 oz. to 15,000 plants.....	4 lbs.	Grass, Red Top, Fencer Clean, 8 to	10			Wheat.....	1 1/2 bu.
Chicory.....	4 lbs.	Grass, Timothy.....	2 bu.				
Clover, Alsike and White Dutch.....	6 lbs.	Grass, Blue, Kentucky.....	2 bu.				

Weight of Various Articles

Per bush.		Per bush.		Per bush.		Per bush.	
Apples.....	26 lbs.	Clover Seed.....	60 lbs.	"Hungarian.....	50 lbs.	Wheat.....	60 lbs.
Apples, dried.....	23 1/2	Corn, shelled.....	56 lbs.	Millet.....	50 lbs.	Flour, per bl., net.....	60 lbs.
Barley.....	48 lbs.	Corn, on ear.....	70 lbs.	Oats.....	32 lbs.	Salt, per bl., net.....	280 lbs.
Beans.....	48 lbs.	Corn Meal.....	50 lbs.	Oatmeal.....	33 lbs.	PER CUBIC FOOT.....	45 lbs.
Buckwheat.....	48 lbs.	Charcoal.....	40 lbs.	Oatmeal range.....	33 lbs.	Hay, well settled.....	1 1/2 lbs.
Broom Corn.....	1000	Cranberries.....	40 lbs.	Onions.....	51 lbs.	Corn, on cob, in bin.....	25 lbs.
Blue Grass, Kent's.....	14 lbs.	Dried Peaches.....	28 lbs.	Peach Pits.....	48 lbs.	Corn, shelled, in bin.....	48 lbs.
Blue Grass, English.....	21 lbs.	Flax Seed.....	56 lbs.	Peas, smooth.....	48 lbs.	Wheat, in bin.....	48 lbs.
Bran.....	20 lbs.	Fowl Meadow.....	12 lbs.	Peas, wrinkled.....	56 lbs.	Oats, in bin.....	25 1/2 lbs.
Canary Seed.....	60 lbs.	Hemp Seed.....	44 lbs.	Perennial Rye.....	20 lbs.	Potatoes, in bin.....	38 1/2 lbs.

Number of Plants or Trees to the Acre at Given Distances

Distance apart.	No. plants.	Distance apart.	No. plants.	Distance apart.	No. plants.	Distance apart.	No. plants.
12 x 1 Inches	32,768	24 x 24 Inches	10,890	36 x 36 Inches	2,448	60 x 60 Inches	1,440
12 x 2 Inches	17,424	24 x 36 Inches	5,445	42 x 42 Inches	1,210	60 x 90 Inches	960
12 x 12 Inches	43,560	30 x 6 Inches	34,848	42 x 24 Inches	6,223	8 x 3 feet	1,815
12 x 18 Inches	29,040	30 x 12 Inches	17,424	42 x 36 Inches	6,223	8 x 4 feet	900
16 x 1 Inches	34,848	30 x 16 Inches	13,680	48 x 12 Inches	8,640	10 x 1 foot	3,600
16 x 2 Inches	17,424	30 x 20 Inches	10,454	48 x 18 Inches	7,790	10 x 6 feet	720
16 x 12 Inches	29,040	30 x 24 Inches	8,712	48 x 24 Inches	5,445	10 x 10 feet	430
16 x 18 Inches	19,360	30 x 30 Inches	6,970	48 x 30 Inches	4,356	12 x 1 foot	3,600
20 x 1 Inches	313,635	36 x 3 Inches	59,060	48 x 36 Inches	3,630	12 x 5 feet	736
20 x 30 Inches	15,631	36 x 12 Inches	14,520	48 x 48 Inches	2,420	12 x 12 feet	302
24 x 1 Inches	201,360	36 x 18 Inches	9,408	60 x 36 Inches	2,000	16 x 1 foot	2,722
24 x 18 Inches	15,520	36 x 24 Inches	7,260	60 x 48 Inches	2,178	16 x 10 feet	170

ARTICHOKE

French, Artichaut. German, Artischoke.

Culture.—Sow in hot-beds and transplant in pots, or so as to give plenty of room, until danger of frost is over, and then set in very rich ground, in rows four feet apart and two feet apart in the rows; or the plants can be raised in seed beds out of doors, but in the old tops and protect the crown with leaves or straw to prevent severe freezing. The second year the plants will commence to form heads about July 1st. The plants may also be blanched like Cardoons, which is accomplished by cutting back the growing stems in July, close to the ground, when the young and rapidly growing shoots, which start up after cutting, may be tied and blanched like Celery. As Artichoke plants do not yield satisfactorily after three or four years, it is best to start a new plantation in three years at least.

Large Globe.—The best sort for table use. Buds large, nearly round; scales deep green, shading to purple, very thick and fleshy. Pkt 5c, oz 25c, 1/4 lb 75c, 1 lb \$2.75.

Jerusalem.—Grown exclusively for its tubers, which somewhat resembles potatoes and are cultivated in a similar manner, only that the rows should be at least four feet apart when growing in strong soil. It is enormously productive, producing 1,500 bushels per acre. It is used mostly in feeding sheep and hogs. Pck 40c, bu \$1.

ASPARAGUS

French, Asperge. German, Spargel.

Asparagus is one of the earliest spring vegetables, and would be in universal use were it not for the prevalent idea that it is difficult to grow it. We think this is a mistake, and that there is no vegetable on our list that can be produced so cheaply and easily as this. It delights in moist, sandy soil, but can be grown in any garden by following the directions given below. A bed 15x50 feet, requiring 50 to 75 plants, should give an abundant supply for an ordinary family.

Culture.—Prepare a light, rich spot as early as possible in the spring. Four boiling water on the seed and pour it off on once, and sow in drills one foot apart and two inches deep. When the plants are well up, thin to two or three inches in the row, and give frequent and thorough cultivation during the summer. If this has been well done, the plants will be fit to set next spring. The permanent beds should be prepared by deep ploughing or spading, and thoroughly enriching the ground with stable manure or other fertilizer. If the soil is not naturally loose and friable, it should be made so by thoroughly stirring with a subsoil plow or the spade. Make rows five feet apart and four inches deep and set the plants in the bottom of the rows two or three feet apart, the latter distance being preferable. Cover the roots about two inches deep. After the plants are well started, give frequent and thorough cultivation, and draw a little earth into the furrows at each hoeing until

they are filled. Early the next spring spade in a heavy dressing of manure, and one quart of salt to each square rod, and cultivate well until the plants begin to die down. The next season the bed may be cut over two or three times, but if this is done all the short shoots, no matter how small, should be cut, and the bed should be given a good dressing of manure, ashes and salt. The next season, and ever after that, the bed should give a full crop and be annually dressed with manure, ashes and salt. The plants should be pulled out not deeply cultivated, until the plants occupy the whole space. In the autumn, as soon as the tops are ripe and yellow, they should be cut and burned. The plants may also be set in autumn, if the soil is not so cold that the water will not stand on it. Winter protection with coarse litter or manure is not needed, except in the extreme north.

Columbian Mammoth White.—We believe this to be the most distinct and valuable variety in cultivation. Not only are the stalks of the largest size, but they are produced abundantly and very early. They are clear white, and remain so in favorable weather, until three or four inches above the surface.

The crown or bud of the young stalk is considerably smaller than the part just below it; thus still further distinguishing the variety. Wherever known this sort commands an extra price, not only on a fancy market, but from canners, who find that when put up, under a special brand, it sells so readily at a high price as to warrant them paying the grower an extra price for it.

From ten to twenty per cent of the plants grown from seed will produce green shoots, but these plants can be readily distinguished and rejected when setting the permanent bed. Pkt 5c, oz 10c, 1/4 lb 35c.

Conover's Colossal.—A mammoth green sort of the largest size and of good quality. The best of the old kinds. Pkt 5c, oz 10c, 1/4 lb 20c, 1 lb 50c.

Palmetto.—A sort which has proven very popular with many gardeners; produces a moderate number of shoots, but these are very large and of the finest quality. Pkt 5c, oz 15c, 1/4 lb 50c, 1 lb \$1.25.



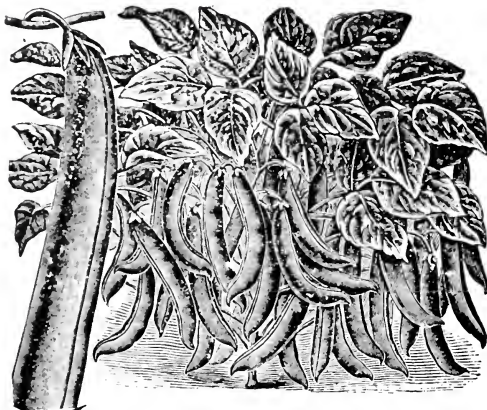
rejected when setting the permanent bed. Pkt 5c, oz 10c, 1/4 lb 35c.

Conover's Colossal.—A mammoth green sort of the largest size and of good quality. The best of the old kinds. Pkt 5c, oz 10c, 1/4 lb 20c, 1 lb 50c.

Palmetto.—A sort which has proven very popular with many gardeners; produces a moderate number of shoots, but these are very large and of the finest quality. Pkt 5c, oz 15c, 1/4 lb 50c, 1 lb \$1.25.

BEANS

Dwarf, Bush or Snap



French, Haricot. German, Bohne.

Under this name are classed all the low growing sorts called in different catalogues Bush, Bunch, Snap, String or Dwarf Beans.

Culture.—No crop responds more readily to good soil and cultivation than this. The soil best adapted to them is a light, rich, well-drained loam, which was manured for the previous crop. If too rank manure is used it is apt to make them grow too much to vine. They are all extremely sensitive to both drouth and wet, and it is useless to plant them before the ground has become dry and warm. The largest return will result from planting in drills about three feet apart, and leaving six plants to a foot in the row. Up to the time of blossoming they should have frequent shallow cultivation, but any cutting of the roots after the plants come into bloom is liable to cause the blossoms to blast, and so cut off the crop. Remember that beans should always be cultivated very shallow, and that it is useless to expect a crop from a field so poorly prepared as to need deep stirring after planting.

From one pint to two quarts will be sufficient to furnish a supply for an ordinary family, and varieties should be selected so as to give a succession both of string and green shelled beans. The wax podded beans are particularly liable to run "off" into green podded plants, and it requires constant attention and skillful selection by seedsmen to keep them pure, so that it is especially important to buy only from reliable sources.

Challenge Dwarf Black Wax—Extra early. The feature, as an extra early sort, is that when one can find in other kinds an occasional very early plant, all the plants of the Challenge will give a full picking of well matured pods. This habit of ripening a large proportion of the crop earlier than other kinds, is of inestimable worth to market gardeners and all who depend on being first in the market for the best prices. The plants are fully as vigorous as the Prolific German Wax, and in habit of growth and general appearance resemble them. They are not quite so large and are a little more upright, and the leaflets are a little larger and coarser and are darker green; pods fully as large and of as good color, but are not quite so much curved and are flatter, though stringless and of excellent flavor. Pkt 10c, 1 lb 15c, 10 lbs \$1.25.

Wardwell's Kidney Wax—The vines of this variety are very large, strong growing, yield a large crop of long, nearly straight, handsome, very white and wax-like pods. They are of good quality, and on this account, as well as their beauty of form and color, are easily sold. They ripen about the same time as the Golden Wax. The dry beans are large, kidney-shaped, white with dark markings about the eye. Market gardeners find this a profitable variety, owing to the large size and handsome color of the pods. Pkt 10c, 1 lb 15c, 10 lbs \$1.25.

Valentine Wax—An improved extra early Valentine bean, with round wax pods. A striking acquisition has been obtained in the list of wax beans through the introduction of this variety. Up till now there has been no variety of such prominence among wax beans that could compare with that of the Valentine among green beans. We now have an excellent wax-podded variety possessing in a remarkable degree the excellent features of this sort. It is very early for a wax bean. It is handsome in appearance, and while it is fair to say that we have not seen it exposed

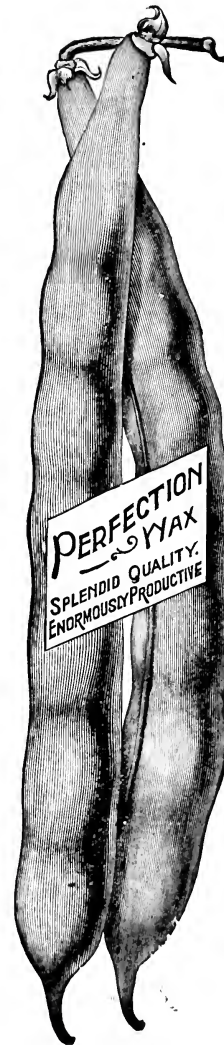
to conditions conducive to the development of rust, yet we think it will prove to be almost rustless. 1 lb 20c, 10 lbs \$1.50.

Improved Rust-Proof Golden Wax—This bean has long been and still continues the standard wax variety for general use, and while many varieties have been introduced, claiming to be superior in some respects and aiming to replace it, they have all sooner or later been forced to the rear as not possessing as many good qualities in as high degree. Vines medium size, erect, moderately spreading, hardy and productive, with small, smooth leaves, and small, white blossoms. Pods are long, nearly straight, broad, flat, golden yellow, very fleshy and wax-like, with short, fleshy, green point, cooking quickly as snaps, shelling well when green, and of the highest quality in both conditions. Beans medium size, oval, white more or less covered with two shades of purplish red. Our stock of this variety is unsurpassed. Pkt 10c, 1 lb 12c, 10 lbs \$1.00.

Speckled Wax—As the merits of this splendid variety become known it is coming more and more into favor as a late crop wax bean. It is the best sort to follow Challenge, Black Wax, Golden Wax, Prolific Wax for a succession. Vines large, much branched, upright, extremely hardy, vigorous and great producers; leaves large and coarse, resembling Kidney Wax. Pods long, cylindrical, crisp, tender, stringless, and of a clear, yellowish, waxy-white color. As the pods mature they are excellent to use as green shell beans. Dry beans, medium size to large long, straight, cylindrical; color light brown, mottled and striped with chocolate brown. For vigor of growth and hardiness, this sort cannot be excelled; as a snap bean it is of extra good quality, and as a shell bean it is as good as the best. As a general crop bean, to be used either as snaps, green shelled or in the dry state, we can confidently recommend it. Owing to its long, cylindrical, very fleshy pods, we think it will be very satisfactory for canner's use. Pkt 10c, 1 lb 15c, 10 lbs \$1.25.

German Black Wax—Pods of good size, almost round, with slightly curved point; color, clear, waxy white or light creamy golden. A very desirable dwarf variety that has remained in favor for many years. The beans are black when perfectly dry. 1 lb 12c, 10 lbs \$1.

Crystal White Wax—Although in reality not a wax bean, it has proven to be one of the most desirable varieties ever produced. It is valuable either for snaps or pickles. The vines are large, of a spreading habit and very productive, having numerous runners, usually producing pods in pairs throughout their entire length. The flowers are rather small, of a yellowish-white shade, pods greenish-white, rather short, curved and quite thick. The ripe beans are oval in shape and of a pure white. 1 lb 15c, 10 lbs \$1.25.



PEAS, BEANS AND CORN, IF WANTED BY MAIL
ADD 8 CENTS PER POUND

MERITORIOUS GREEN PODDED BUSH BEANS



New Stringless Green Pod—is most happily named, as it is quite unique—the only absolutely stringless green podded bean in the market. The pod is round, full, larger and straighter than those of most other varieties. The quality is most superior. The Michigan State Agricultural College Experiment Station writes: "Plants of medium growth. Pod $\frac{4}{8}$ to $\frac{5}{8}$ inches long, nearly round, slightly curved, light green in color, flesh tender and of the best quality. The pods remain long in edible condition; even when the beans are large, the pods are not stringy. Valuable for good quality and lack of

stringiness." You will make no mistake by planting this splendid new variety either for family or market purposes. Pkt 10c, $\frac{1}{2}$ lb 15c, 1 lb 25c, 10 lbs \$2.00.

Extra Early Refugee—The earliest strain of Refugee by ten days. One of the most profitable beans ever grown. Loaded with pods in any season, and of a fine quality. Grown by all market gardeners, who are always quick to pick up a good thing and to stick to it after they once see it. Pkt 10c, 1 lb 15c, 10 lbs \$1.25.

Improved Early Red Valentine—Is ten days earlier than any other stock of Valentine beans ever offered. In addition to this, it is more productive, grows a stronger and more thrifty vine, and yields larger and better filled pods than does any other strain of this variety. A single trial cannot but convince the most skeptical that it is all we claim. Pkt 10c, 1 lb 15c, 10 lbs \$1.25.

Long Yellow Six Weeks, Improved Round Pod—While this variety does not differ from the Early Yellow Kidney Six Weeks in size or general appearance of the vine, the pods are shorter, very much thicker, more fleshy. Moreover, while retaining the vigor and hardness of the old sort, it is fully one week earlier. Dry bean, color of ordinary Six Weeks, but is much shorter, almost round. Pkt 10c, 1 lb 15c, 10 lbs \$1.25.

Early Mohawk—This sort is so much harder than the others that it can be planted earlier, and often in this way will furnish beans fit for use before any other kind. Vines large, stout, with large, coarse leaves which will stand a slight frost; blossoms large, purple; pods long, straight, coarse, with long, tapering point; beans long, kidney shaped, variegated with drab, purple and brown. This variety is much in favor for forcing under glass, as it matures quickly and carries a good weight of long, large pods. Pkt 10c, 1 lb 15c, 10 lbs \$1.25.

Early China Red Eye—Vines medium, stout, erect, healthy with large leaves and white blossoms; pods short, straight, flat, and if picked young, of good quality as snaps; beans medium size, oblong, white with reddish-purple blotch about the eye. When green they are thin skinned, mealy and tender, and when dry are still the best of all for baking; although they cook dark, are the best of all in flavor. Farmers who want to plant a few beans for home supply should by all means use this sort. Pkt 10c, 1 lb 15c, 10 lbs \$1.00.

The Burpee Bush Lima—This is a bush form of the well-known large White Lima bean. It is very fixed in its bush character, growing to a uniform height of about 20 inches. While not so early as Henderson's Bush Lima, its larger size will commend it to many. The pods are the exact size of the large Pole Limas and contain as many beans of the same delicious quality. Pkt 10c, 1 lb 20c, 10 lbs \$1.80.

Henderson's Bush Lima Bean—Magnificent dwarf-growing Lima; very early, of a delicious flavor, extremely productive and should be planted in every garden in America. It's early, it's fine, it's just the thing for a family garden. It is wonderfully prolific. A package or a pint will furnish sufficient for a good-

sized family. It is one of those beans that can't be improved upon. Pkt 10c, 1 lb 20c, 10 lbs \$1.80.

POLE OR RUNNING BEANS

Lazy Wife—The most popular pole bean grown. Pods are wonderfully broad, thick and above all entirely stringless. They surpass any other variety in the way vines cling to the poles, and every bean grower will at once acknowledge this is the most important qualification. Pods are rather flattish, oval shape, and when fully grown are from four to six inches long, exceedingly rich, buttery and fine flavored when cooked. They are hardy, easily grown and most productive. For an early and late snap sort, also as a dry shell or winter bean it is unsurpassed, and such is the peculiar taste and pleasing flavor of this bean that we have known persons who would not eat other varieties of string beans after tasting Lazy Wife. Pkt 10c, 1 lb 20c, 10 lbs \$1.50.

White Crease Back—This variety is especially valuable for its extreme earliness and its habit of perfecting all of its pods at the same time. Vines small to medium, but vigorous, and in good soil wonderfully productive, bearing pods in clusters of from four to twelve. Pods medium length, silvery green, of the best quality as snaps, and stand shipping better than most sorts. The beans are too small to be of much value when shelled green, but are of very superior quality baked. Pkt 10c, 1 lb 20c, 10 lbs \$1.50.

Kentucky Wonder—This splendid variety, introduced by us in 1885, has since been offered as Seek No Further, and was introduced in 1891 as a novelty under the name of Old Homestead. Vine vigorous, climbing well and very productive, bearing its pods in large clusters; blossoms white; pods green, very long, often reaching nine or ten inches, nearly round when young, and very crisp, becoming very irregular and spongy as the beans ripen. Dry beans long, oval, dun-colored. An early and very prolific sort, with showy pods which are most excellent for snap. It is sometimes catalogued as being the same as Southern prolific, but this is an error, as the latter is two weeks later and has shorter pods. Pkt 10c, 1 lb 15c, 10 lbs \$1.30.

Dutch Case Knife

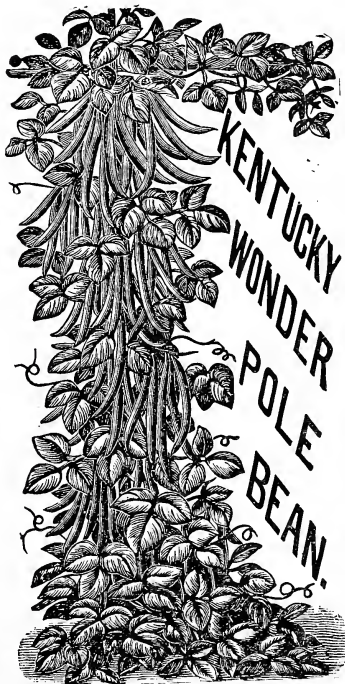
Vines moderately vigorous, climbing well, but twining more loosely than some and so may be used for a corn hill bean. Leaves large, crumpled; blossoms white; pods very long, flat, irregular, green, but becoming creamy white; beans broad, kidney shaped, flat, clear white, and of excellent quality, green or dry. Pkt 10c, 1 lb 15c, 10 lbs \$1.25.

Large White Lima

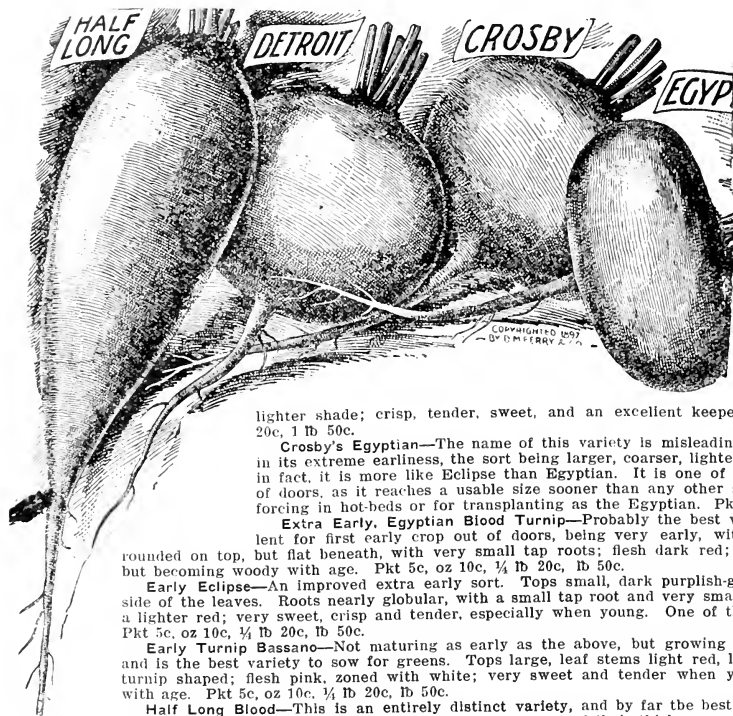
Too late for the extreme north, and being supplanted by Selbert's Early Lima, because the latter is earlier. Vine tall growing, vigorous, but slender; leaves medium sized, smooth, light green; blossoms small, white; pods borne in clusters, long, broad, very thin, dark green; beans large, ovoid, kidney shaped, greenish white, flat. Pkt 10c, 1 lb 15c, 10 lbs \$1.40.

King of the Garden Lima

Vine very vigorous and productive. Pods of the largest size, filled with four or five immense white beans of the finest quality. On account of its large pods it is a favorite with market gardeners. It will come into bearing sooner and will make larger pods if not more than two vines are left to grow on a pole. Pkt 10c, 1 lb 20c, 10 lbs \$1.50.



BEETS AND MANGEL WURTZELS



lighter shade; crisp, tender, sweet, and an excellent keeper. Pkt 5c, oz 10c, 2 oz 15c, ¼ lb 20c, 1 lb 50c.

Crosby's Egyptian—The name of this variety is misleading, as it resembles the Egyptian only in its extreme earliness, the sort being larger, coarser, lighter colored and nearer round than flat; in fact, it is more like Eclipse than Egyptian. It is one of the best sorts for early planting out of doors, as it reaches a usable size sooner than any other sort, but it is not as well suited for forcing in hot-beds or for transplanting as the Egyptian. Pkt 5c, oz 10c, 2 oz 15c, ¼ lb 20c, 1 lb 55c.

Extra Early, Egyptian Blood Turnip—Probably the best variety for forcing, and is also excellent for first early crop out of doors, being very early, with small top. Leaf very dark red, rounded on top, but flat beneath, with very small tap roots; flesh dark red; hard, crisp and tender when young, but becoming woody with age. Pkt 5c, oz 10c, ¼ lb 20c, 1 lb 50c.

Early Eclipse—An improved extra early sort. Tops small, dark purplish-green shading to lighter color on outside of the leaves. Roots nearly globular, with a small tap root and very small collar. Flesh dark red, zoned with a lighter red; very sweet, crisp and tender, especially when young. One of the most desirable sorts for bunching. Pkt 5c, oz 10c, ¼ lb 20c, 1 lb 50c.

Early Turnip Bassano—Not maturing as early as the above, but growing to a large size; may be used early, and is the best variety to sow for greens. Tops large, leaf stems light red, leaves light green, roots large, round, turnip shaped; flesh pink, zoned with white; very sweet and tender when young, becoming woody and tasteless with age. Pkt 5c, oz 10c, ¼ lb 20c, 1 lb 50c.

Half Long Blood—This is an entirely distinct variety, and by far the best for winter use. The roots are about one-half as long as the Long Dark Blood, but on account of their thickness weigh quite as much. They are always smooth and handsome, and their rich, dark red flesh is very sweet, crisp and tender, never becoming woody, even in portions above the ground. We consider this the most valuable among recent introduction. Pkt 5c, oz 10c, ¼ lb 15c, 1 lb 35c.

Improved Long Dark Blood—Tops large, neck small, leaf, stems and vines red, leaf green, roots large, tapering towards both ends, growing even with the surface, dark red; flesh dark red, zoned with lighter shade; very tender and sweet, and remaining so when kept till spring. Pkt 5c, oz 10c, ¼ lb 15c, 1 lb 50c.

Detroit Dark Red Turnip—A grand beet for bunching for market. Tops exceptionally small and uniformly upright; roots are perfect turnip shape with small tap roots. The principal fault with most turnip beets is the occasional appearance of

white rings, but by careful selection this has been overcome, and this will be found to be one of the deepest red beets. Quality is of the very best, sweet and tender. Gardeners can safely plant it largely. Pkt 5c, oz 10c, ¼ lb 20c, 1 lb 60c.

Improved Early Blood Turnip—An extra selected stock of blood turnip, having larger, coarser tops and roots than the Detroit Dark Red, and requiring a considerably longer time to mature. Excellent for summer and autumn use. Pkt 5c, oz 10c, 2 oz 10c, ¼ lb 15c, 1 lb 50c.

The following varieties are used for stock feeding. They are easily grown and harvested, keep well through the winter, and give an immense amount of cattle food at a small cost, but need a rich, well prepared soil. Sow in drills thirty inches apart, as early as the ground can be got in condition. Cultivate well when young, and thin out the plants to one foot apart in the row. If these trimmings are carefully handled, and the larger leaves cut off, they can easily be reset to fill vacancies, and will make the largest roots. Care should be taken not to break or bruise the roots any more than necessary in harvesting.

SUGAR BEETS

Improved Klein Wanzleben Sugar Beet—The analytical chemists of Europe have united in recommending this variety as possessing the highest sugar-producing qualities. It grows below the surface and produces a fine, shapely root, the best sort for the sugar experimenter to use. Pkt 5c, oz 10c, ¼ lb 15c, 1 lb 40c, 5 lbs \$1.50.

Lane's Improved Imperial Sugar—An improvement on the French Sugar Beet. Hardier, more productive, yielding 35 to 40

tons per acre, and containing a greater percentage of sugar. One of the best for cattle feed. Pkt 5c, oz 10c, ¼ lb 15c, 1 lb 40c, 5 lbs \$1.50.

Vilmorin's Improved White Sugar—An improvement on the old White Sugar. Very rich. Pkt 5c, oz 10c, ¼ lb 45c, 5 lbs \$1.50.

Red Top White Sugar Beet—The old variety, largely grown for stock feeding. Pkt 5c, oz 10c, ¼ lb 15c, 1 lb 40c, 5 lbs \$1.50.

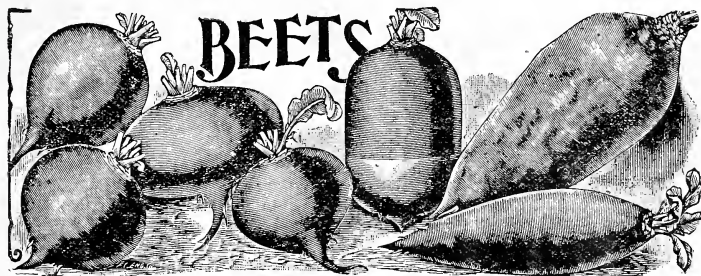
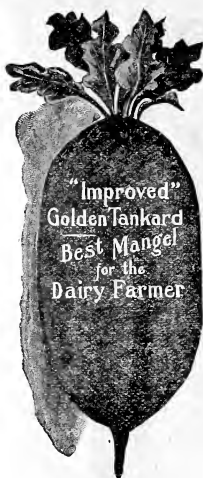
MANGEL WURTZEL

Golden Tankard—Tops comparatively small, with yellow stems and mid ribs, neck very small, roots large, ovoid, but filled out at top and bottom so as to approach a cylindrical form. Flesh yellow, zoned with white. A great improvement and worthy of use on every farm. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 15c, lb 40c.

Red Globe—Similar to Yellow Globe, except in color, which is a light red or pink. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 15c, lb 40c.

Long Red—A large, long variety, grown for stock feeding. It stands a good deal out of the yellow; color light red, flesh white and rose colored. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 15c, lb 35c.

Improved Mammoth Long Red—An improvement on the old variety. The roots are uniformly straight and well formed and deeper colored than the common sort. Highly recommended for stock feeding. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 15c, lb 40c.



Norbitan Giant Long Red—Very large, growing well out of the ground. The roots are well formed, straight, smooth and of a fine scarlet color, with comparatively small top and neck. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 15c, lb 50c.

Yellow Globe—This is, we think, one of the best varieties of Mangel Wurtzel known for stock feeding. It has exceedingly small tops and few leaves, leaf stalks and blades green; roots medium size, uniformly globe-shape, having a very small tap and few side roots; color of skin deep orange yellow; flesh white and of excellent quality. The roots grow almost entirely above

ground, making them admirably adapted to shallow ground and very easy to harvest. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 15c, lb 40c.

Yellow Leviathan—Roots long, olive shaped, large, growing over one-half out of the ground; flesh white, sweet and tender; tops bright green, comparatively small; neck small, short. We think this is, perhaps the best of the yellow field beets, because its fine flesh never becomes woody, and its roots grow so well out of the ground, that the crop is easily harvested. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 15c, lb 40c.

The following statement from one of the most prominent authorities on agriculture in the Northwest speaks volumes in showing the superior quality of MANGEL and other ROOT crops:

"My experience in farming covers a period of over twenty years, during which time I have rarely cultivated less than two to twenty acres of mangel wurtzel and Swedish turnip. As a stock breeder, I have always considered them my most important crops. In North Dakota, where I had the largest herd of thoroughbred cattle, I averaged from twenty to thirty tons of roots to the acre.

Yours, etc.,

"C. J. ALLOWAY."

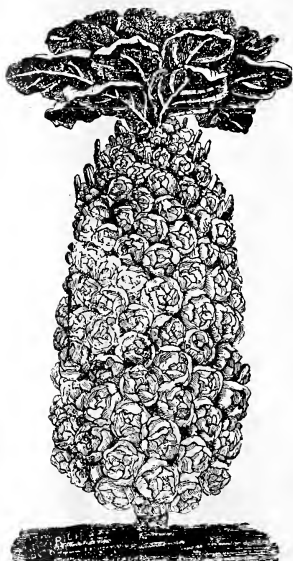
NOTE.—Dr. Alloway was State Veterinarian for North Dakota for three years; for a long time President of the Pine Stock Growers' Association of North Dakota; Lecturer to State Agricultural College at Brookings, S. D.; Director in Grand Forks County Agricultural Society, and one of the largest, most progressive and successful stock breeders in the United States.

BRUSSELS SPROUTS

French, Chou de Bruxelles. German, Sprossen-Kohl.

Culture.—They should be treated in all respects like winter cabbage or kale.

The plant grows two or three feet high, and produces from the sides of the stalk numerous little sprouts resembling cabbage heads one or two inches in diameter. The leaves should be broken down in the fall, to give the little cabbages more room to grow. Pkt 5c, oz 20c, $\frac{1}{4}$ lb 50c.



BROCOLI

French, Chou Brocoli. German, Spargel-Kohl.

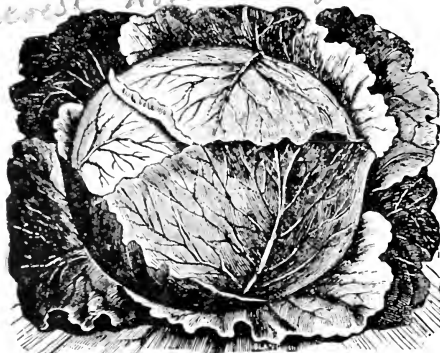
Culture.—The same as that given for cauliflower.

Although originating from a very distinct type, the modern improved sorts of broccoli can scarcely be distinguished from cauliflower; the points of difference being that they are generally taller and the heads more divided. By some considered more delicate than the cauliflower.

Early Purple Cape—This is the best variety for our climate. It produces large heads, of a brownish-purple color, very close and compact, and of excellent flavor. Pkt 5c, oz 40c, $\frac{1}{4}$ lb \$1.25.

Large White—Same as above, only not quite so hardy. Pkt 5c, oz 40c, $\frac{1}{4}$ lb \$1.25.

Shaw's Improved True Hollander *Harvest Home* HIGH BRED AMERICAN GROWN CABBAGE SEED



Culture.—A heavy, moist and rich loam is most suitable, which should be deeply manured and worked deep. Cabbage is so universally grown all over the country that specific directions regarding the time and methods of planting for all localities cannot be given. The late autumn and winter varieties may be sown from the middle to the last of spring, and transplanted when about six inches high, one and a half to three feet apart in the row, according to size of the variety. Shade and water the late sowings in dry weather to get them up. It is important that the plants should stand thinly in the seed bed, or they will run up weak and slender, and be likely to make long stems.



Early Jersey Wakefield—This is the earliest and hardest heading of the extra early sorts, and most gardeners depend upon it for the bulk of their extra early crop. Our stock is grown and selected with the greatest care, and there is none better and few as good. Heads conical, very compact and solid, of excellent quality. The thick, stout leaves and compact habit of this sort make it the best of all for wintering over and very early setting. Pkt 5c, oz 20c, $\frac{1}{4}$ lb 60c, lb \$2.25.

Early York—An early variety. Heads small, heart shaped, firm and tender; of very erect and dwarf habit, so that they may be grown 15 or 18 inches apart. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 40c, lb \$1.25.

Early Large York—Succeeds the Early York. It is of large size, about ten days later, more robust and bears the heat better. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 40c, lb \$1.25.

Early Winnigstadt—One of the best for general use, being a very sure header, and will grow a hard head under circumstances where most sorts would fail, so that those who have failed with other kinds could hope to succeed with this. Plant very compact, with short, thick leaves. Heads regular, conical, very hard, and keep well both summer and winter. Pkt 5c, oz 15c, $\frac{1}{4}$ lb 45c, lb \$1.50.

Early Dwarf Flat Dutch—Continued experience confirms our belief that this is the best early round-headed sort. Stems short, leaves comparatively few, having short stalks, upright, so that plants can be planted closely; heads large, solid, and stand long without bursting. Our stock should not be confounded with the inferior later stock frequently offered under this name. Pkt 5c, oz 15c, $\frac{1}{4}$ lb 45c, lb \$1.50.

All Seasons—Heads very large, round, often nearly spherical, but usually somewhat flattened; very solid, and of the best quality, keeping as well as the winter sorts. Plant very vigorous and sure heading; leaves large, smooth, with dense bloom. Remarkable for its ability to stand the hot sun and dry weather. Our trial has shown that heads which were fit for market by July 10th were still saleable September 10th, the only change being increased size and density. One of the very best sorts for general cultivation. Pkt 5c, oz 15c, $\frac{1}{4}$ lb 45c, lb \$1.50.

Hollander or Danish Ball Head—In some important particulars this is the most remarkable cabbage yet produced. In fact, it well illustrates the truth that "merit will win," in that while it was introduced only about four years ago, it has already become the favorite sort with those who have had the true stock. The heads, which are very solid and deep, are of medium size, aver-

aging about 8 lbs. in weight; in color, they are entirely distinct; in point of quality they have no superior, and they keep better than any other sort, the heads being as solid and perfect when taken up in the spring as when put away in the fall. At that time no cabbage will sell beside them even at one-half the price. Large Pkt 5c, oz 30c, $\frac{1}{4}$ lb 85c, lb \$3.00.

We import our Holland or Danish Ball Head cabbage direct from the best grower in Denmark.

Henderson's Autumn King—It produces enormous solid heads of that dark shade of green that is most desirable in a cabbage, and has such small outer leaves that it can be planted much closer together than the ordinary late sorts, and can be relied upon to produce a greater weight of crop per acre than any other variety. A distinctive feature of the Autumn King is the peculiarly crimped leaves. Next to Glant Flat Dutch, it is unquestionably one of the best late sorts of today. Pkt 10c, oz 30c, $\frac{1}{4}$ lb 70c, lb \$2.50.

L. B. & Co.'s Harvest Home—Late. We have yet to see the cabbage of equal quality that will yield as large a weight from a given area as the Harvest Home. We have yet to see the cabbage that will equal it in reliability of heading, uniformity of size and solidity of head. We unhesitatingly recommend it to any one desiring the best cabbage for fall and winter keeping or kraut making. Oz 20c, $\frac{1}{4}$ lb 75c, lb \$2.50.

Premium Late Flat Dutch—As a variety for winter market it has no superior, and is more extensively grown than any other. Head large, bluish-green, round, solid, broad and flat on top, and often tinted with reddish-brown after being touched with frost; they open white and crisp, are tender and well flavored. It is a fall and winter variety, and one of the very best to keep. With good cultivation, on moist, rich ground, ninety-five in a hundred will head up large and fine. Decidedly the best late variety for cultivation in our state. Pkt 5c, oz 15c, $\frac{1}{4}$ lb 40c, lb \$1.50.

American Late Perfection Savoy—This is the best of the Savoy class, either for home use or market. Heads large, very solid and compact, of a yellowish-green color, and, like all other of the Savoy varieties, is of excellent flavor. Pkt 5c, oz 25c, $\frac{1}{4}$ lb 75c, lb \$2.50.

Mammoth Rock Red—This is by far the best, largest and surest-heading red cabbage ever introduced. The plant is large, with numerous spreading leaves. The heads are large (averaging 10 to 12 pounds each), round, very solid, and of deep red color. Pkt 5c, oz 25c, $\frac{1}{4}$ lb 75c, lb \$2.50.

CAULIFLOWER

The cauliflower, although one of the most delicious vegetables, is but little grown except by professional gardeners, by reason of the erroneous notion that it is so difficult to grow, that only skilled gardeners can produce it. We are certain that any one will be reasonably successful with this most desirable vegetable if they will observe the cultural directions given below.

Culture.—For spring and early summer crop sow in March or early in April in hot-bed and transplant to cold frame when sufficiently large, and to the open ground as soon as danger of hard freezing is over. The plants will endure a light frost. The soil for cauliflower should be like that for cabbage, but it is better to be made richer than is ordinarily used for that crop. For late crop sow at same time as for late cabbage and treat in the same manner. After the heads begin to form draw the leaves over them and pin or tie them together

to protect them from the sun and keep them white. They should be cut for use while the "curd" is compact and hard, as they soon become tough and bitter after they open and separate into branches.

L. & B. Co.'s Earliest Dwarf Erfurt Extra Select Cauliflower—Is the surest header and most profitable, and no other sort has yet surpassed this excellent variety. It is the best for forcing and open ground; the earliest and finest of all varieties. Scarcely a plant fails to produce a good head. It is of dwarf habit, compact growth, short outside leaves; can be planted 20 inches apart each way. The best for early market and family use, and can be entirely relied upon, as the seed was grown with extra care by one of the most careful growers in Erfurt. A very shy seeder on account of its compact, solid heads. Plenty of cauliflower seed is sold in this country as the Earliest Dwarf Erfurt variety at

Early London—A well-known variety, fine, white and compact heads. Pkt 10c, oz 60c.

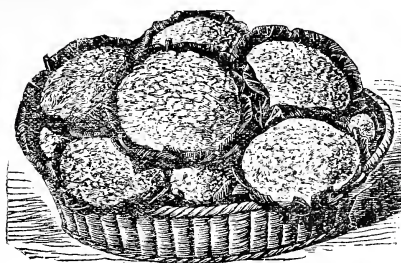
Early Giant Autumnal—Extra fine sort, producing large white heads, and comes to maturity early in autumn. Pkt 10c, oz 60c.

CARROTS

The carrot is one of the most wholesome and nutritious of our garden roots, and deserves to be more extensively used, both for culinary and stock feeding purposes. We urge our readers to give some of the early table sorts a trial. For feeding stock, especially horses and milch cows, the carrot cannot be surpassed, and it should be grown largely by farmers each season for this purpose.

Our packets of carrot contain on an average about 6,000 seeds. One ounce will sow one hundred feet of drill. Three to four pounds for one acre.

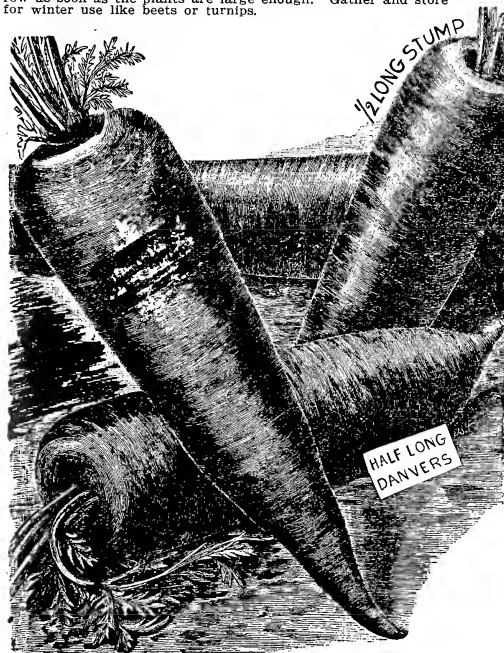
Culture.—While a sandy loam made rich by manuring the previous year is the best soil for the carrot, any good land, if thoroughly and deeply worked, will produce satisfactory crops. A clover sod turned under deeply and well enriched with a dressing of rotten manure, is most excellent for the general crop. When it is possible to do so, it is advisable to sow as early in the spring as the ground is fit to work, though good crops may, in this latitude, be grown from sowings as late as June 15. Prepare the ground thoroughly and sow in drills eighteen to twenty-four inches apart, using from one and one-half to three pounds to the acre, according to the distance between rows. Cover one-half to one inch deep and see to it that the soil is well firmed about the seed. As soon as the plants appear, use the cultivator or wheel hoe, and do not let the weeds get a start. Thin to three to six inches apart in the row as soon as the plants are large enough. Gather and store for winter use like beets or turnips.



a low price. Beware of such seed; it cannot be genuine. Pkt 25c, ¼ oz \$1, oz \$3, lb \$30.

Early Snowball—Highly esteemed by market gardeners for its earliness and reliability as a sure header; it grows on a robust stem, and produces magnificent white heads of fine quality. The outer leaves are short, allowing the plants to be set closer together than most varieties. Its dwarf, compact habit of growth renders it one of the best for forcing under glass; although cultivated principally for an early crop, it does equally well for late planting. Pkt 25c, ¼ oz 75c, oz \$2.50.

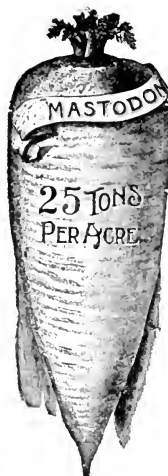
Early Paris—Head rather large, white and compact; stalk short. Pkt 10c, oz 50c.



Improved Danver's Half Long—A first-class carrot for all soils; in form, midway between the Long Orange and Short Horn. The root is of a rich, dark orange color and grows very smooth and handsome. Twenty to thirty tons per acre not being an unusual crop. Pkt 3c, oz 10c, ¼ lb 20c, lb 60c.

Improved Long Orange—A well-known standard sort; roots long, thickest near the crown, tapering regularly to a point; color, deep orange. Suitable for the table and main field crop. Pkt 3c, oz 10c, ¼ lb 15c, lb 50c.

L. & B. Co.'s Mastodon Carrot—This is the heaviest cropping carrot grown, yielding more tons to the acre than any other sort. The flesh is white, crisp, solid and very sweet in flavor. It is a vast improvement on the white and green Belgian sorts which have been such favorites in the past, as it is not only much more productive but vastly easier to handle. The roots are short and very heavy at the shoulder, rendering them easily harvested. An important feature, also, is that they do not easily break in pulling or storing. Too much can scarcely be said of their size and great productive-ness. The roots frequently measure 15 to 20 inches in circumference, and 18 to 25 tons to the acre is not an extravagant



statement as to the yield. Large pkt 10c, $\frac{1}{4}$ lb 30c, $\frac{1}{2}$ lb 50c, 1b 90c, 5 lb \$3.75.

L., B. & Co.'s Victoria Carrot—This is the largest and unquestionably the heaviest cropping and most nutritious yellow variety in cultivation. It is the largest and best form of Orange or Yellow Carrot known. The roots are remarkably fine, very symmetrical and of excellent quality, possessing high feeding properties. It is a heavy cropper on all soils, but especially adapted for strong or rich land. It grows fully half as much weight again per acre as the ordinary varieties, and as the roots grow more above the ground it is much easier to gather the crop. This grand variety is sure to suit every one who grows it. Large pkt 10c, $\frac{1}{4}$ lb 30c, $\frac{1}{2}$ lb 50c, 1 lb 90c, 5 lbs \$2.00.

White Belgian—Grows long; green top, well out of the ground. Large pkt 5c, $\frac{1}{4}$ lb 20c, $\frac{1}{2}$ lb 30c, 1 lb 50c, 5 lbs \$2.00.

Yellow Belgian—Similar to the white, but yellow in color. Large pkt 5c, $\frac{1}{4}$ lb 20c, $\frac{1}{2}$ lb 30c, 1 lb 50c, 5 lbs \$2.00.

Early French Forcing—The earliest variety, largely grown for forcing purposes; globular shaped root of an orange red color. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, 1b 60c.

Early Scarlet, or Short Horn—One of the most popular varieties grown; color deep orange; one of the best for table use. Pkt 3c, oz 10c, $\frac{1}{4}$ lb 20c, 1b 60c.

Oxheart, or Guerande—This fine and very popular carrot is intermediate as to length between the half long varieties (such as Danvers) and the Scarlet Horn carrots, but much thicker than the latter, being at the top from four to five inches in diameter. Flesh, bright orange, fine grained and sweet. It is of very fine quality for table use and equally good for stock. Where other sorts require digging, Oxheart can be easily pulled, making it a particularly desirable sort for soils so stiff and hard that other sorts do not do well. Pkt 3c, oz 10c, $\frac{1}{4}$ lb 20c, 1b 60c.

Chantenay—As a table variety it is first-class; in shape it is

larger than the Scarlet Horn, and also broader at the shoulder. The flesh is of a beautiful, rich, orange color, and of the finest quality; it is medium early, with small tops. Roots taper slightly but are uniformly stump rooted. Gives great satisfaction in both the market and private garden. Pkt 3c, oz 10c, $\frac{1}{4}$ lb 20c, 1b 60c.

CHERVIL

A hardy annual, worthy of more general use for flavoring and garnishing. The curled variety is even more beautiful than parsley and can be used to great advantage in beautifying dishes of meat and vegetables. Sow in early spring in rich, well prepared soil, and when plants are well established transplant to about one foot apart.

Curled—Greatly superior to the old, plain variety, being earlier, more handsome and having fully as fine fragrance and flavor. Pkt 5c, oz 10c, 2 oz 20c, $\frac{1}{4}$ lb 30c, 1 lb \$1.00.

CHICORY

Large Rooted, or Coffee—Our stock is the improved type, with very much larger, smoother, whiter and proportionately shorter roots than the old kind. The dried and prepared roots are used quite extensively as a substitute or adulterant for coffee. Sow the seed as early in the spring as the ground can be prepared, in a rather light, moderately rich soil, in drills fifteen inches apart for garden, and two to two and one-half feet for field culture. When the plants are sufficiently large, thin to four to six inches apart in the row. Keep clear of weeds, and in the fall dig the roots, slice them and dry in an apple evaporator, or kiln constructed for the purpose. Where the roots are grown in quantity for the manufacturers of the "prepared" chicory, they are usually brought to the factory in the "green" state and there dried in kilns constructed for the purpose. Pkt 5c, oz 10c, 2 oz 15c, $\frac{1}{4}$ lb 25c, 1b 75c.

COLLARDS

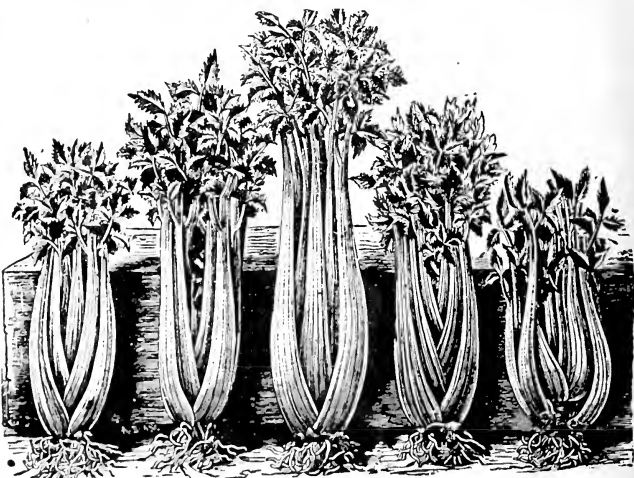
A variety of cabbage known in different sections as "Cole," "Colewort," or simply "Greens." It is extensively used in the South, where it continues in luxuriant growth all winter.

Georgia, Southern, or Creole—We offer the true white or green stemmed sort so extensively used in the South, where it furnishes an abundance of food for man and beast. Forms a large, loose, open head, or a mass of leaves on a tall stem. Freezing does not injure, but rather improves, their quality. Sow thick in drills, in rich ground, transplanting when four inches high, or sow in drills where the plants are to remain, and thin to two or three feet apart in the row, when of proper size. In the South sow from January to May, and August to October. Pkt 5c, oz 10c, 2 oz 20c, $\frac{1}{4}$ lb 30c, 1b \$1.00.

CELERY

Celery has come so generally into use that almost every garden has a bed devoted to its growth, and if the soil is rich and the plants well cared for the Celery will be one of the most prized products of the garden.

Culture—Sow the seed (which is slow to germinate) in shallow boxes or in a finely prepared seed bed out of doors, in straight rows, so that the small plants may be kept free from weeds. See to it that the seed bed is kept moist, almost wet, until the seeds germinate, as plenty of moisture is essential to get a satisfactory growth. When about two inches high, thin out and transplant so that they may stand three inches apart, and when the plants are four inches high cut off the tops which will cause them to grow stocky. The crop is usually made to succeed some earlier crop, but in order to grow good celery the soil must be made as rich as possible; the essentials to success being very rich soil and plenty of water. If good plants are used they may be set out as late as the middle of August, but the best results are usually obtained from setting about the middle of June or the first of July. The most desirable time will depend upon local climate, and is that which will bring the plants to maturity during cool, moist weather. In setting, prepare broad, shallow trenches about six inches deep and four feet apart, in which the plants should be set six inches apart, cutting off the outer leaves and pressing the soil firmly about the roots. When the plants are nearly full grown they should be "handled," which is done by one man gathering the leaves together while a second draws the earth about the plant to one-third its height, taking care that none of the earth falls between the leaves, as it would be likely to cause them to rot. After a few days draw more earth about them, and repeat the process every few days until only the tops of the leaves are visible, or the leaves may be pressed together by two hands held firmly together. Care should be taken that the plants are not disturbed while the crop may be simply "handled," and then at



inches apart by cross-ties and stakes, when in a few days more it will be fit for use, they or the ground are wet, as it would be sure to injure them. A part of the approach of severe freezing weather taken up and set out compactly in a dark

cellar or an unused cold frame which can be kept just above the freezing point, and it will then gradually blanch so that it may be used throughout the winter. Should the plants begin to wilt, water the roots, without wetting the stalks or leaves, and they will revive again.

Perle Le Grand—The most beautiful Celery that ever graced a table. Flavor most delicious, crisp and nutty. So brittle that a stalk held in the hand will almost break of its own weight. Absolutely solid and free from stringiness. The first and the last Celery that is fit to use. Its beautiful golden heart and rich nutty flavor are unapproached by any other variety. It has been found a most excellent winter keeper. Pkt 5c, $\frac{1}{2}$ oz 15c, oz 25c, 2 oz 45c, $\frac{1}{4}$ lb 70c, lb \$2.50.

Golden Self-Blanching—Our seed from the original Paris introductors is as pure a strain as exists. Its rich golden yellow color, its close habit and compact growth, and, greater than all, the readiness with which it is bleached and rendered marketable, make it invaluable to the gardener and exceedingly popular with every planter. The entire stock is solid, crisp, and although not as early, a much better keeper than the White Plume. Pkt 5c, $\frac{1}{2}$ oz 15c, oz 25c, 2 oz 45c, $\frac{1}{4}$ lb 75c, lb \$2.50.



Evans' Triumph—The best late Celery. This variety has a very strong and vigorous plant, with large, very white, crisp, brittle, tender and fine flavored stalks. It is late and requires the whole season to develop, but will keep longer than any other sort. We recommend it as worthy of the first place as a late Celery. Pkt 5c, oz 30c, 2 oz 55c, $\frac{1}{4}$ lb \$1.00, lb \$3.00.

Dwarf Golden Heart—Pkt 3c, $\frac{1}{2}$ oz 10c, oz 15c, $\frac{1}{4}$ lb 40c, lb \$1.50.

Perfection Heartwell—Pkt 5c, $\frac{1}{2}$ oz 10c, oz 15c, $\frac{1}{4}$ lb 50c, lb \$1.75.

New Rose—Pkt 5c, $\frac{1}{2}$ oz 12c, oz 20c, $\frac{1}{4}$ lb 60c, lb \$2.00.

Giant White Solid—Pkt 3c, $\frac{1}{2}$ oz 10c, oz 15c, $\frac{1}{4}$ lb 40c, lb \$1.50.

Crawford's Half Dwarf—Pkt 5c, $\frac{1}{2}$ oz 15c, oz 20c, $\frac{1}{4}$ lb 40c, lb \$1.50.

Boston Market—Pkt 3c, $\frac{1}{2}$ oz 10c, oz 15c, $\frac{1}{4}$ lb 40c, lb \$1.50.

Soup Celery or Smallage—Pkt 3c, $\frac{1}{2}$ oz 10c, oz 15c, $\frac{1}{4}$ lb 40c.

Celery Seed for Flavoring—Oz 5c, $\frac{1}{4}$ lb 12c, lb 35c.

White Plume—Self-blanching. This sort is too widely known to require an extended description. We will only say that we have not yet found a Celery that is as early and of as good a flavor, as crisp and tender as our selection of this sort. We sell every year large quantities of this seed to market gardeners, who find it uniformly white and free from green or hollow stalks. It is not as good a keeper as our Giant Golden Heart, but it is unsurpassed for fall and early winter use, and is the earliest Celery known. Pkt 5c, $\frac{1}{2}$ oz 12c, oz 20c, 2 oz 35c, $\frac{1}{4}$ lb 60c, lb \$2.00.

Giant Pascal—One of the best for fall and winter use. It is a selection from the Golden Self-Blanching, and adds to the general good qualities of its parent superior keeping qualities. The stalks are very large, solid, crisp, and of a rich, nutty flavor, free from any trace of bitterness. It blanches very easily and quickly, and retains its freshness a long time after being marketed. The heart is golden yellow, very attractive. Pkt 5c, $\frac{1}{2}$ oz 12c, oz 20c, 2 oz 35c, $\frac{1}{4}$ lb 60c, lb \$1.75.

New Pink Plume—The stalks of this magnificent new Celery are of clear, creamy white, shaded with a beautiful delicate pink. In flavor it is sweeter than any other, all red Celery having a stronger "celery" flavor, and is preferred by Celery lovers wherever known. The foliage is white, like the White Plume, and the plants bleach naturally. It has the long keeping qualities for which red Celeries are noticeable, and the faint tint of pink makes it wonderfully attractive for table use. It has no tendency to rust, and owing to its white tops matures and blanches as early as White Plume. Pkt 7c, $\frac{1}{2}$ oz 15c, oz 25c, 2 oz 40c, $\frac{1}{4}$ lb 70c, lb \$2.50.

Giant Golden Heart—The best Celery for winter storage. Ever since we introduced this Celery it has gained in public favor, and rightly so, for it is not only the best keeper, but it is large, solid, as sweet as a walnut and of a beautiful golden color. It is a selection from the Dwarf Golden Heart, grows much larger than its parent, but otherwise possesses all its excellent qualities. We strongly recommend it to gardeners as well as to private planters. Pkt 10c, $\frac{1}{2}$ oz 20c, oz 30c, 2 oz 50c, $\frac{1}{4}$ lb 85c, lb \$3.00.

"Kalamazoo," or Solid Ivory—The fine Celery sent out under the name "Kalamazoo" has enjoyed a wide and extended popularity and has proven to be one of the most solid, compact, strong growing and easily bleached market varieties. We are selling it as a thoroughly reliable sort both for family and market use; keeps well through the winter. Pkt 5c, $\frac{1}{2}$ oz 12c, oz 20c, 2 oz 30c, $\frac{1}{4}$ lb 60c, lb \$2.00.

CELERICAC, OR TURNIP-ROOTED CELERY

Culture.—Sow the seed at the same season and give the same treatment as common celery. Transplant the young plants to moist, rich soil, in rows two feet apart and six inches apart in the rows. Give thorough culture. As the roots are the edible portion of this vegetable, it is not necessary to earth up or "huddle" it. After the roots have attained a diameter of two inches or over they will be fit for use. To keep through winter pack in damp earth or sand and put in the cellar, or leave out of doors, covering with earth and straw, like beets or carrots.

Turnip-Rooted—The root of this variety is turnip shaped and

tender, having a sweeter taste and stronger flavor than other varieties. It is used principally for seasoning meats and soups. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 30c, lb \$1.00.

Giant Prague Celericac—This is unquestionably the largest and best Celericac in existence. The roots are very large, twice as large as the Erfurt, almost globe shaped, smooth, with only a few roots at the bottom. Flavor is excellent. Pkt 5c, $\frac{1}{2}$ oz 10c, oz 15c, $\frac{1}{4}$ lb 50c, lb \$1.50.

Our special collections and discounts are very liberal.

You will find something of interest on every page of this book.

Read carefully and you will find your reward.

Your correspondence is solicited, and we will cheerfully furnish any information in our power.

SWEET OR SUGAR CORN

White Cob Cory—We consider this the best extra early sweet corn. The ears are fully as large and well filled as Cory, and just as early, and have the great advantage of a white cob, making this variety the best extra early market corn. We hope all our friends will plant largely of this for early crop, as we feel sure that it cannot fail to give entire satisfaction. Pkt 10c, lb 14c.

Cory—The largest of the extra early sorts. The plant is stout and vigorous, but short, and it will mature a full crop earlier than any of the much lauded new strains. Ears eight-rowed, with red cob and very large, light pink grains. All the red cobbled corn should be cooked quickly by dropping the ears into boiling water to which a little salt has been added, for if simmered over a slow fire, or allowed to stand in the water after cooking, the red cob will discolor the kernels. Pkt 10c, lb 14c.

Crosby's Early—A most excellent variety, remarkably early and of the best flavor. Ears of medium size, twelve or more rowed; grain very thick and sweet. This is the sort so largely grown in Maine for canning, and it is the use of this variety rather than any peculiarity of soil that has given Maine Sweet Corn its reputation for quality. Pkt 10c, lb 14c.

Early Minnesota—This old and deservedly popular variety is one of the best early sorts for the market and the private garden. Stalks short and not suckering, bearing one or two ears well covered with husks; ears long, eight rowed; kernels very broad, sweet and tender, not shrinking much in drying. By careful selection we have developed a stock of this standard variety which is remarkably uniform, and in which all the good qualities which have made it so popular are intensified. Pkt 10c, lb 14c.

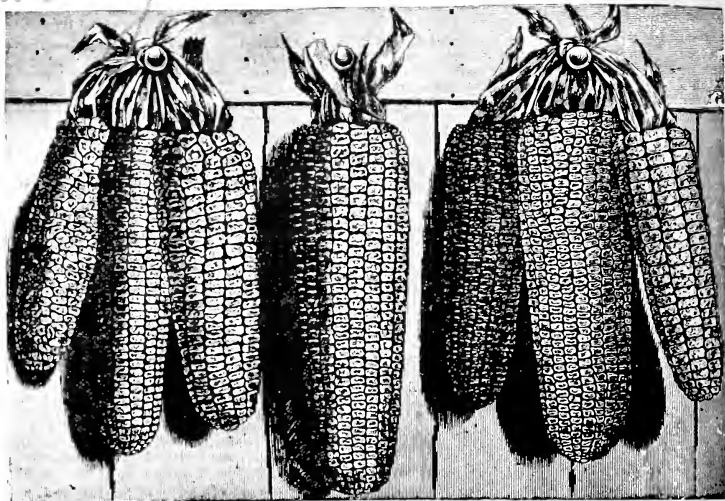
Stowell's Evergreen—The standard main crop variety, and if planted at the same time with earlier kinds, will keep the table supplied until October. It is hardy and productive, very tender and sugary, remaining a long time in condition suitable for boiling. Our stock has been carefully grown and selected to avoid the tendency to a shorter grain and deterioration in the Evergreen character of this best known of all late sorts. This and Mammoth are standard late varieties in the South. Pkt 10c, lb 14c.

Mammoth—This variety produces the largest ears of any sort with which we are acquainted, a single ear sometimes weighing two or three pounds. It is of excellent quality, sweet, tender and delicious, and its only fault is the immense size of the ear. Pkt 10c, lb 14c.

Moore's Early Concord—Produces its large, handsome, fourteen rowed ears very low on the stalk, and comes into use after Perry's Hybrid. The quality is faultless, being much like the Crosby, and it is an excellent sort to follow that variety, either for the canning factory or the garden, and it is valuable as an intermediate variety. Pkt 10c, lb 14c.

Black Mexican—Although the ripe grain is black or bluish-black, the corn, when in condition for the table, cooks remarkably white, and is surpassed by none in tenderness. This, by many, is considered the most desirable for family use of the second early sorts. It does especially well for second early in the South. Pkt 10c, lb 14c.

Old Colony—Originated near Plymouth, Mass., about fifty years ago; was lost sight of for a while; revived and sold under various names, such as Landreth's Sugar, etc. We consider it a more desirable sort than the Country Gentleman or the Ne Plus Ultra in that the skin is not so tough and certainly is all



that can be desired in quality. Stalks about six feet high, usually bearing two large, sixteen to twenty rowed ears; grain very deep and the sweetest and best of the late varieties. It is fit to use a few days earlier than Evergreen; cannot be excelled as a market sort and is of the best for canners. Pkt 10c, lb 20c.

FIELD CORN

Early Red Blazed—This flint variety is not only early, but will endure uninjured a degree of cold and wet that would be fatal to other sorts. Stalks medium height, without suckers, dark green with red or bronze markings. Leaves broad, green at base, but bronze at top, particularly while the plant is young. Ears long, eight rowed, well filled, small at base. Grain flinty and of fine quality, bright yellow at the tips. It is also known as Smut Nose. Pkt 10c, lb 10c.

Early Golden Dent, or Pride of the North—A very early Dent variety, ripening with the flint sort, and can be grown as far north as any other variety of Dent corn. Stalks small, with broad leaves. Ears short, twelve to sixteen rowed, well filled. Grain long, yellow, making an extra quality of meal. Pkt 10c, lb 10c.

Early Canada, or Yellow Flint—The standard of the early yellow flint corns. Per lb 10c, 100 lbs \$5.00.

Champion Pearl White Dent—A standard late variety, with No. 1 white grain. It is very hardy, can be planted closely and stands droughts. Per lb 10c, 100 lbs \$5.00.

Mercer Corn—Stalks six feet high, with two to three good ears nine to eleven inches in length and well filled. A rich golden yellow flint corn and very productive. Per lb 10c, 100 lbs \$5.00.

Triumph Corn—A yellow flint corn, extremely early and called an "eighty-day corn." Ears thirteen inches long, with fourteen to sixteen rows. Both grain and ears are larger than the Mercer. The ears average two to the stalk. The habit of this corn admits of close planting, and one foot apart in the rows will secure an immense crop of corn and fodder. Per lb 10c, 100 lbs \$5.00.

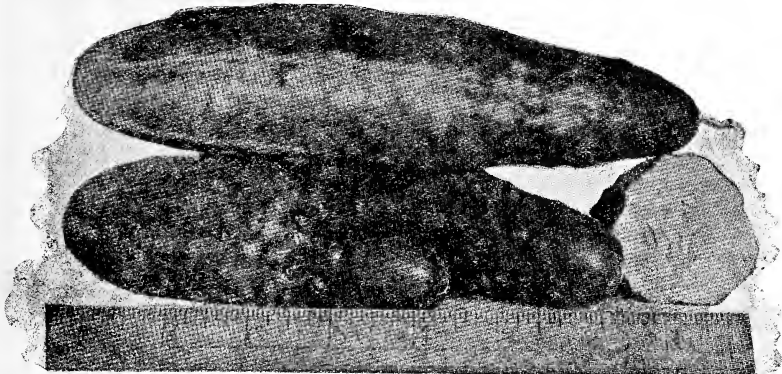
POP CORN

Rice, for Popping—A very handsome variety. Ears short; kernels long, pointed, and resemble rice; color white; very prolific. Probably no variety of Pop-Corn is superior to this for popping. lb 10c.

If Peas, Beans or Corn are wanted by mail, add 8 cents per pound to cover postage

CUCUMBER

THE
"1901"



Pkt. 10c
Oz. 40c
1-4 lb. \$1

This is one of the vegetables which can be grown to perfection by any one who can control a few square yards of soil which is fully exposed to the sun, and the fruit is so much better when gathered fresh from the vines than it is when obtained in the market, that every family should be supplied from its own yard.

Culture.—The soil for cucumbers should be thoroughly enriched with well rotted manure in order to obtain the largest yield, but any rich garden soil will grow seed cucumbers. Plant the seed in rows six feet apart, and four to six feet apart in the row, dropping fifteen to twenty seeds in a hill. After the plants begin to crowd and the striped beetles are pretty well gone, thin to three plants to the hill. Give frequent but shallow cultivation, until the plants make runners so long that this is impracticable. In field culture, plow furrows four feet apart across the field, and similar ones, but omitting every fourth furrow, at right angles to the first; this will form paths for the distribution of manure and the gathering of the fruit. At each intersection drop a shovelful or more of well rotted manure, which should be well mixed with the soil, so as to form a low, flat hill.

In gathering, pick all the fruit before it begins to ripen, as the vines will cease setting fruit as soon as any seed commences to mature.



Early Russian—Earliest and hardiest. The vines vigorous and productive. Fruit three to four inches long, thick, oval, pointed at each end. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 50c.

Early Cluster—Vines vigorous, producing the bulk of the crop near the root and in clusters. Fruit short, holding full size to each end; dark green, but paler at blossom end. Good for table use, but not adapted to pickling. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 50c.

Cool and Crisp—A strain of White Spine; larger, but not so evenly shaped. It well deserves its name and is therefore very popular for table use. Oz 10c, $\frac{1}{4}$ lb 20c, lb 60c.



Boston Pickling, or Green Prolific—A distinct variety, very popular for pickles. Fruit very smooth and symmetrical, cylindrical, but a little pointed at each end; bright green and a great producer. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 50c.

Early Short Green, or Early Frame—An excellent sort both for table use and for pickling. Plants very vigorous and productive.

Fruit straight, handsome, smaller at each end, bright green, lighter at the blossom end, with crisp, tender flesh, and makes excellent pickles. Our stock is very superior. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 50c.

Giant Pera—Very large, smooth skin, few seeds, splendid for slicing. Oz 15c, $\frac{1}{4}$ lb 35c, lb 75c.

Bismarck—A cross between Long Green and White Spine, producing dark colored, slender pickles like the former, and becoming like the latter at maturity. Fruit long, cylindrical, very constant in form and color; flesh crisp and tender; excellent either for pickles or slicing. Those who want a Cucumber longer than White Spine, but with its other characteristics, will find in this variety all they desire. It is also one of the best on the list for slicing. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 60c.



Improved Long Green—Produced by selection from the Long Green. Vines vigorous and productive, forming fruit fit for the table nearly as early as the shorter sorts; fruit about twelve inches long, firm and crisp. The young fruit makes one of the best of pickles, and when ripe is the best of any for sweet pickles. We offer a carefully selected strain, uniformly long and of good form, with the large warts and spines well distributed over the surface, instead of being clustered at one end, as in inferior stocks. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 50c.



Gherkin, for Pickling—A very small, oval, prickly variety, quite distinct from all others. It is grown exclusively for pickling. It is the smallest of all the varieties, and should always be picked when young and tender. The seed is slow to germinate, requiring usually from two to three weeks. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 35c, lb \$1.00.

Early White Spine—One of the best sorts for table use. Vines vigorous, fruiting early and abundantly; fruit uniformly straight and handsome; light green with a few white spines; flesh tender and of excellent flavor. In this country this variety is used more, perhaps, than any other for forcing under glass. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 50c.

CRESS

Culture.—The seed should be sown and lightly covered, in gravelly, mucky lands, along the borders of small, rapid streams, and the plants will need no subsequent culture, as under favorable conditions they increase very rapidly by self-sown seed and extension of the roots.

True Water—This is quite distinct from the curled variety, and only thrives when its roots and stems are submerged in water. It is one of the most delicious of small salads and should be planted wherever a suitable place can be found. Pkt 5c, oz 30c, $\frac{1}{4}$ lb \$1.00.

Culture of the Curled Varieties.—The seed should be sown in drills about eighteen inches apart, on very rich ground, and the plants well cultivated. It may be planted very early, but repeated sowings are necessary to secure a succession. Keep off insects by dusting with Pyrethrum Powder.

Curled, or Pepper Grass—This small salad is much used with lettuce, to which its warm, pungent taste makes a most agreeable addition. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 50c.

EGG PLANT

The Egg Plant, when well grown and properly cooked, is a delicious vegetable, and it should find a place in every garden.

Culture.—The seed germinates slowly, and should be started in strong heat, for in this, as in all sub-tropical plants, it is of importance to secure a rapid and continuous growth from the first, the plants never recovering from a check received when young. When the plants have formed two rough leaves, transplant to three or four inches apart. Keep to bed closed and very warm, shading from the direct rays of the sun and giving abundance of water until the ground is warm and all danger, not only from frost, but from cold nights, is past; then harden the plant by gradual exposure to the sun and air, and decrease the supply of water, then carefully transplant into the open ground, setting the plants two and a half feet apart. If needed, shade the young plants and protect them from the potato bug, which is very fond of them and will often destroy them. Some seasons plants will fail to set fruit, or will not begin bearing until too late to mature, no matter how faithfully they have been cared for. This is especially liable to happen if the summer is cool or rather moist. We know of no remedy for this. Pinching off the ends of the branches after the plants begin to bloom, and not letting more than two or three fruits set will often effect something, and is a good practice.

Early Long Purple.—This is one of the earliest and most productive varieties; fruit long, dark, rich, purple, and of fine quality. Pkt 5c, oz 20c, $\frac{1}{4}$ lb 60c, lb \$2.00.

Black Pekin.—Nearly as early as the last, and nearly as large as the later sorts. Very prolific and desirable for market gardeners' use. Fruit nearly round; skin smooth, black and glossy; flesh white, fine grained and delicate. Pkt 5c, oz 30c, $\frac{1}{4}$ lb \$1.00.

Improved Large Purple (Spineless).—This variety has about superseded all others, both for market and private use. The large size and high quality of its fruit and its extreme productiveness make it the most profitable to grow. Plants large, spreading; foliage light green; fruit very large, oval, or short pear shaped; color dark purple. Plants ripen usually two to six large fruits. Bear in mind that our stock is spineless, which is a great advantage in handling. Pkt 5c, oz 30c, $\frac{1}{4}$ lb \$1.00.

ENDIVE

Culture.—Endive may be grown at any season of the year, but is more generally used late in the fall. Sow the seed during June or July in drills fourteen inches apart, and when well established thin the plants to one foot apart. When nearly full grown, tie the outer leaves together over the center in order to blanch the heart of the plant. By covering every few days a succession may be kept up.

Moss Curled.—A variety growing considerably denser and having the leaves much finer cut than the Green Curled; in fact, the whole plant is more compact. When well blanched it makes a very attractive appearance. Pkt 5c, oz 15c, $\frac{1}{4}$ lb 40c, lb \$1.25.

Ever White Curled.—By far the most beautiful variety. Plant moderately dense, with divided leaves, which are coarser and less tender than those of the Green Curled; but even the outer leaves are very light colored, frequently white, so that the plant is very attractive and always brings the highest price on the market. Pkt 5c, oz 20c, $\frac{1}{4}$ lb 50c, lb \$1.50.

GARLIC

A bulbous rooted plant, with a strong, penetrating odor, but much esteemed by some for flavoring soups, stews, etc. We frequently receive orders for garlic seed, but we can only supply bulbs. $\frac{1}{4}$ lb 15c, lb 50c.

Culture.—Prepare the ground the same as for onions, and plant the bulbs in drills eight inches apart, and four inches apart in the rows, and cover two inches deep. When the leaves turn yellow, take up the

There is no vegetable which is more universally used than this, and yet few people know how inviting and appetizing it is when brought to the table fresh and unspiced, a condition in which it is rarely, if ever, found in our markets, and which can only be secured by growing the plants in one's own garden. So we earnestly urge all of our readers who can possibly do so to grow their own lettuce.

Culture.—Lettuce should grow rapidly, and to attain this end it should be sown in a rich, thoroughly prepared soil. For early crop sow under glass from November to February and thin out as necessary to prevent crowding. Keep at a moderate heat and give all the air and light possible. For early out-door culture start plants in the fall, protecting them as needed with frames or coarse cotton, or start under glass from January till March and harden off before setting in the open ground, which should be done as soon as the ground and weather will permit.

For general crop sow out doors as early in spring as ground can be worked, in drills eighteen inches apart and thin the young plants to four inches apart in the row. As the plants begin to crowd, thin out and use as required. In this way a much longer succession of cuttings may be had from the same ground. Sow at intervals of from two to three weeks throughout the summer for a continuous crop. In this, as in every other garden crop, thorough cultivation is essential.

bulbs and dry in the shade, and lay them up in a dry loft as you would onions.

HORSE RADISH

Horse Radish produces no seed, but is grown from pieces of the roots. Small roots, 10c each or 40c per doz, postpaid; by express, \$1.50 per 100.

Culture.—Mark off rows two and one-half feet apart, in rich, moist, well prepared ground, and set the pieces of roots eighteen inches apart in the rows, two to three inches below the surface, the small end down. Cultivate thoroughly until the tops cover the ground, when their shade will keep down the weeds.

KALE



Borecole, Kale or German Greens are general terms applied to those classes of Cabbage which do not form heads, but are used in their open growth. Some of the varieties are the most tender and delicate of any of the Cabbage tribe. They are hardy and are improved rather than injured by the frost.

Culture.—As far north as New York they may be sown in September and treated like Spinach, although in the south they will live and grow throughout the winter without protection, or they may be planted and treated like winter cabbage, and will continue growing till very late. If cut when frozen, thaw out in cold water before boiling. The young shoots which start up in the spring from the old stumps are very tender and make excellent greens.

TALL GREEN CURLED SCOTCH.—This is very hardy, and improved by a moderate frost. About thirty inches tall, with an abundance of dark green leaves, which are densely curled and cut, forming a very beautiful plant. It stands the winter in the Middle States without any protection. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 75c.

DWARF CURLED SCOTCH, OR GERMAN GREENS.—Plant low and compact, but with large leaves curled, cut and crimped until the whole plant seems like a bunch of moss. It is well worth cultivation simply for its beauty. One of the best sorts for use, and when well grown and cooked is one of the most palatable of vegetables. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 75c.

GERMAN DWARF PURPLE.—Similar to the Dwarf Curled Scotch, but of a rich purple color. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 30c, lb \$1.00.

KOHL RABI

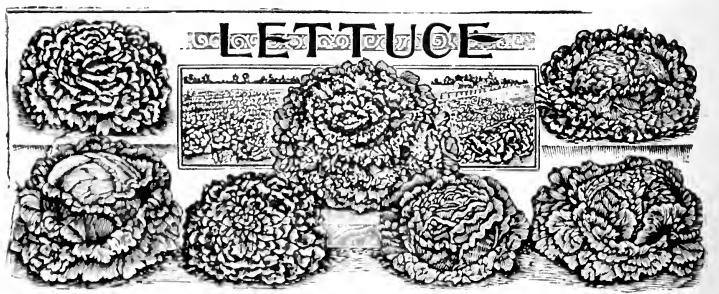


The Kohl Rabi is a vegetable intermediate between the Cabbage and the Turnip, and combines the flavor of both. The edible part is a turnip shaped bulb formed by the swelling of the stem. When used for the table this should be cut when quite small, as it is then very tender and delicate, but if allowed to reach its full size it becomes tough and stringy.

Culture.—Sow in light, rich soil, as early as possible, in drills sixteen inches apart, and when well established thin to six inches apart in the row. One or two plantings at intervals of ten days will give a succession until hot weather, when they fail to grow well, but plantings may be made the latter part of July for fall use.

EARLY WHITE VIENNA.—Very early, small, handsome, white bulb. Best early variety for table. Pkt 5c, oz 20c, $\frac{1}{4}$ lb 60c, lb \$1.75.

EARLY PURPLE VIENNA.—Nearly identical with the last, except in color, which is a bright purple, with the leaf stems tinged with purple. Pkt 5c, oz 25c, $\frac{1}{4}$ lb 75c, lb \$2.25.



Grand Rapids (Seed Black)—As a lettuce for greenhouse forcing this variety undoubtedly stands at the head of the list. Leaves medium size, of light yellowish green color, much crimped and frilled, thin, but of very upright growth; forms a fair size but loose cluster of leaves, which cannot be properly called a head; crisp, tender and of good quality. Owing to its upright habit it may be planted very closely. It is of extremely rapid growth; very little liable to rot; will stand without spoiling a week to ten days after it is fit to cut, and retains its freshness a long time after cutting. It will stand shipping a longer distance than any other variety of this class. Pkt 5c, oz 15c, ¼ lb 40c, lb \$1.25.

Early Curled Silesia (Seed White)—An early erect growing, loose headed variety, which may be used very young, when it is exceedingly sweet and well flavored; color light green; leaves much frilled and savoyed. Pkt 5c, oz 10c, ¼ lb 30c, lb \$1.00.

Early Tennis Ball (Seed Black)—A first-class head lettuce, and one of the best head lettuces for forcing under glass or early planting out. Plants medium size, having thick, dark green leaves, and when well grown forming compact, solid heads, which blanch easily and are crisp and tender. Should not be planted in the hot weather of summer, as it runs up to seed quickly. Pkt 5c, oz 10c, ¼ lb 30c, lb \$1.00.

Tilton's White Star (Seed White)—A distinct sort of great merit, of the Black Seeded Simpson type, but grows larger and more rapidly, and its leaves are broader, thicker, darker and less frilled at the edge. It forms a large and solid central cluster of leaves, making almost a head; blanches perfectly and is of excellent quality. The plants remain long in condition for use before running to seed, and keep long after cutting without wilting. Repeated trials, both for forcing and early planting outdoors, convince us that this is a decided improvement over other varieties of this class for either purpose. Pkt 5c, oz 15c, ¼ lb 40c, lb \$1.25.

Early Prize Head (Seed White)—The enormous demand for this favorite proves conclusively that it has no superior where a thin, tender, crisp and sweet lettuce is wanted for the home garden or local market. Being so thin leaved and tender, it of course wilts very quickly after cutting, and so it is not adapted for growing for distant markets. Plant large, deep green, so washed with red as often to appear more red than green; forming a head of a dense mass of leaves rather than one like a cabbage, and very slow to run to seed; leaves large, nearly round, frilled at the edge, and coarsely savoyed or "blistered"; exceedingly crisp, tender and good flavored, and does not become bitter as early as other varieties. Pkt 5c, oz 10c, ¼ lb 30c, lb \$1.00.

Hanson (Seed White)—So well known as to hardly need any description. Plant large, forming a large, flat head, resembling that of a cabbage, and so slow to run to seed that it often fails to form any seed. Outer leaves bright green, with prominent, light covered veins; inner leaves white and usually curved and twisted at the base; very tender and sweet. We have seen heads of this variety as large as a cabbage and about as solid. It is the standard summer head lettuce. Pkt 5c, oz 10c, ¼ lb 30c, lb \$1.00.

Philadelphia Butter or Early Whitehead (Seed White)—Many prefer a thick leaved, smooth lettuce, and to meet this demand we present this sort. Plant dark green, with many nearly round, thick leaves, formed into a very solid, round head, which stands a long time without running to seed. Leaves very thick, folded or puckered at base, the inner ones blanched to a rich yellow color, and exceedingly rich and nutty in flavor. Pkt 5c, oz 10c, ¼ lb 30c, lb \$1.00.

Black Seeded Simpson—For those who like a large, thin, exceedingly tender leaf, and for those markets which demand a large, loose cluster of leaves rather than a solid head, this is one of the best varieties either for forcing or early sowing out of doors. Plants large, forming a large, loose head; light yellowish-green in color, so that a little wilting is not noticed. Leaves large, thin, slightly ruffled and blistered, the inner ones nicely blanched, and even the large outside leaves are tender and of good quality. One of the best and most popular varieties for market gardeners, as it is attractive, of excellent quality, and continues a long time in condition for use. Pkt 5c, oz 10c, ¼ lb 30c, lb \$1.00.

Simpson's Early Curled (Seed White)—Similar to the last, but the plant is a little smaller and decidedly darker in color, and the leaves are more frilled and blistered. Pkt 5c, oz 10c, ¼ lb 30c, lb \$1.00.

Brown Dutch (Seed Brown)—An old sort, noted for its hardness. Leaves large, thick, green, tinged with brown. It always forms a large, solid head, which is somewhat coarse-looking, but the inner leaves are beautifully blanched, exceedingly sweet, tender and well flavored. Desirable because of its hardness and fine quality. Pkt 5c, oz 10c, ¼ lb 30c, lb \$1.00.

Buttercup (Seed White)—Plants medium size, with numerous round, smooth leaves, which are of a beautiful yellow color, and very sweet and tender. They form medium sized, fairly solid heads, which when prepared for the table are exceedingly attractive in appearance. Pkt 5c, oz 10c, ¼ lb 30c, lb \$1.00.

Large Drumhead, or Victoria Cabbage (Seed White)—The largest of the heading lettuces. Plant very large, forming an immense loose head, bright green without and light green or white within. Leaves very large, strongly veined, coarse, but the inner ones are very crisp and tender. Pkt 5c, oz 10c, ¼ lb 30c, lb \$1.00.

Deacon (Seed White)—While this does not make as large a head as some others, the heads formed are very solid and of excellent flavor, and remains in condition for use as long as any variety in cultivation. Plant medium size, with very few outer leaves; leaves light green, very thick. This is certainly one of the best varieties for summer use. Pkt 5c, oz 10c, ¼ lb 30c, lb \$1.00.

Cos, Early White Self-Folding (Seed White)—A distinct Cos Lettuce which does not need tying up. The leaves are yellowish-white in color, long, narrow, upright, folding into a solid head like that of an Early York Cabbage. This is a truly self-blanching Lettuce, is very crisp and tender and of superior flavor. Pkt 5c, oz 15c, ¼ lb 40c, lb \$1.25.

LEEK

Belongs to the onion family, and by some preferred to that vegetable.

Culture—Sow the seed and care for the young plants same as for onions. When the young plants are about the size of a goose quill, transplant to a prepared bed, in rows one foot apart and four or five inches in the row. Set the roots deep and draw the earth to them when cultivating, so that they may be well blanched by the time they are fit for use.

London Flag—Is the variety more cultivated in this country than any other. It is hardy and of good quality. Pkt 5c, oz 10c, ¼ lb 30c, lb \$1.00.

Large American Flag—A variety which has become very popular with some market gardeners on account of its being larger than the London Flag. Pkt 5c, oz 15c, ¼ lb 40c, lb \$1.25.

Large Rouen—Stem very large, but comparatively short; the leaf is very broad, but covered with whitish bloom. Stands a long time in condition for use. Pkt 5c, oz 15c, ¼ lb 40c, lb \$1.25.

Monstrous Carentan—The largest variety; often three inches in diameter, and becoming very white and tender; a very hardy sort. Pkt 5c, oz 15c, ¼ lb 40c, lb \$1.50.

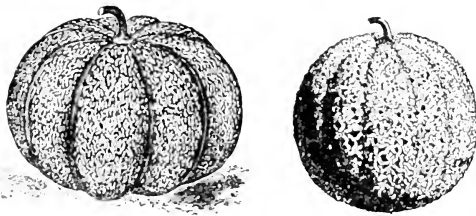


MELON, MUSK

The Musk Melon is too universally popular to need any special description.

Culture—Cultivate as recommended for cucumbers, except that the hills should be six feet apart. Rich earth for the young plants is far better than manure, but if the latter must be used see that it is well rotted. If the plants grow very rank, more and finer fruit will be secured by pinching off the end of the shoots when about three feet long. The quality of melons of all varieties is largely dependent upon conditions of growth and ripening. Unhealthy vines or unfavorable weather produce fruit of comparatively poor flavor.

Rocky Ford—An oval-shaped netted melon, medium size, very solid; flesh thick and juicy. It is very early and productive and has wonderful shipping qualities. It is popular with hotel and restaurant keepers, always a good seller and a money-maker.



maker for the grower. Our seed is genuine stock from Rocky Ford, Colorado. Oz 15c, $\frac{1}{4}$ lb 35c, lb \$1.00.

Cosmopolitan—This grand new green-fleshed variety, combining as it does the firm, sweet flesh of the French Cantilope and the delicious flavor of the American Musk Melon, is truly cosmopolitan in character. It is one of the most distinct and uniformly handsome melons ever introduced. The hardy vine is wonderfully productive of globular fruits, which are densely covered with gray netting. It is exceedingly sweet, melting and high flavored. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 30c, lb \$1.00.

Hackensack, or Turk's Cap—Fruit very large, flattened globe shape, ribs large and of irregular width; densely covered with coarse netting; flesh green, thick, coarse, but very sweet and fine flavored. We have taken great pains to have our stock of this true to the "Turk's Cap" type, and after careful comparison with that of other growers do not hesitate to pronounce it the best in the country. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 60c.

Jenny Lind—An extra early green fleshed melon, and one of the sweetest in cultivation. Fruits globular or flat globe shaped, ribbed and covered with a shallow netting; medium size to small. One of the best melons for hotel and restaurant use, on account of its convenient size. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 60c.

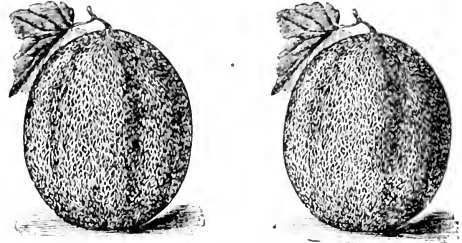
Small Green Nutmeg—Fruit medium size, slightly ribbed, globular. Skin dark green, becoming yellow when overripe, and nearly covered with broad shallow netting. Flesh thick, a little coarse, but of fine flavor. This variety is in universal demand for both home and market use. It is the size so much sought after by hotels and restaurants. Our stock is carefully grown and selected, and will be found first class in every particular. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 60c.

Improved Large Green Nutmeg—Vines vigorous, hardy, productive; fruit very large, round, slightly flattened at both ends, ribbed, covered with coarse netting; flesh very thick and of the highest flavor. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 60c.

Montreal—Our stock of this variety, unlike most offered, is of distinct and uniform type. Fruit of the largest size, often measuring twelve to fourteen inches in diameter; spherical, or slightly oval in shape, with regular, shallow ribs, and sparsely covered with netting; flesh light green, very juicy, sweet and of excellent flavor. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 60c.

Bay View—Fruit long and of the largest size, frequently weighing fifteen to seventeen pounds; deeply ribbed and covered with coarse netting; flesh green, thick and of fine flavor. A favorite in some markets. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 60c.

Casaba, or Green Persian—One of the largest and best musk melons in cultivation. Fruit long, oval, a little pointed at each end; flesh green, very sweet. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 60c.

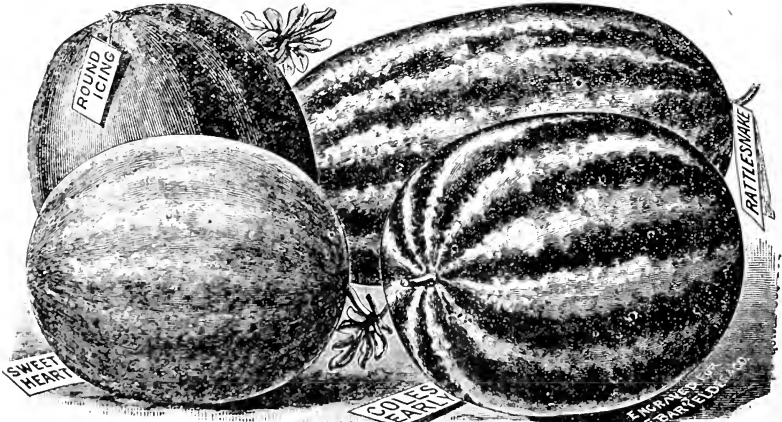


RED OR YELLOW FLESHED SORTS

Osage, or Improved Miller's Cream—This melon has made its way into public favor from the market rather than the garden, and seems to be just what people want. It is medium size, oval, slightly ribbed, dark green in color, covered more or less with shallow netting. The flesh is deep salmon color, exceedingly sweet and high flavored, and is good to within a fourth of an inch of the rind, and very thick, there being but a slight cavity in the center of even the largest fruit. A favorite variety in some markets. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 60c.

Emerald Gem—The standard of excellence among the salmon fleshed varieties. Fruit small to medium size, globular, or slightly flattened at the ends, only slightly netted and ribbed. Skin deep green while young, becoming tinged with yellow as the fruit matures; flesh deep salmon yellow, thick, ripening close to the rind, and is unsurpassed in flavor. This variety has steadily grown in popular favor and in many large markets leads all other kinds. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 60c.

WATER MELON



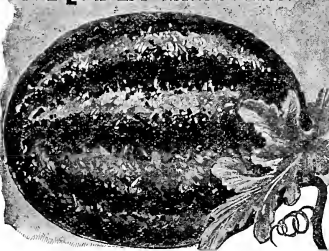
Culture—The essential thing is to get a good strong vine early in the season, which may be secured by forming a large, well-drained hill of earth, made very rich with an abundance of well rotted manure, which should be thoroughly mixed with the soil, for if left in a mass it will lead to the plants burning out under the hot sun, and thus to the failure of the crop. On this hill plant the seed as soon as the ground is warm and dry, and carefully protect the young plants from insects, and hasten their growth by the use of liquid manure.

Sweet Heart—This variety has no equal as a melon to ship to distant markets, and it is so attractive in appearance that it is readily sold when all others are a drug. Of the largest size, a little longer than thick, but nearly globular in shape. Skin

very bright, beautiful mottled green. Flesh bright red, firm and heavy, but crisp, melting and exceedingly sweet. This melon is not only a good keeper, but it improves in quality for a long time after ripening. Seeds dark gray. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 25c, lb 75c.

Citron—Grows uniformly round and smooth, striped and marbled with light green. Flesh white and solid; seeds red. It should be borne in mind that this variety is not used for eating in the raw state, but for preserves, pickles, etc. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 50c.

J. E. & CO'S KLONDIKE THE EARLIEST WATER MELON



KlonDIKE—The earliest. The great objection to the extremely early Water Melons has been their inferior quality. This has been entirely overcome in the KlonDIKE, which is offered with full assurance of not only being remarkably early, but as sweet, delicate and melting in flavor as any variety grown. The flesh is of deep scarlet. Rind thin, and on this account is not a particularly good shipping sort. It will ripen in altitudes where it has not been thought possible to mature a good Water Melon. It is to all other varieties of Water Melons what the Early Minnesota is to Tomatoes. The earliest and of quality second to none. Pkt 10c, oz 15c, ¼ lb 25c, lb 75c.

Kentucky Wonder—A distinct variety; long oval in shape and of good size; skin dark green; flesh scarlet, crisp, rich and sugary; always firm and solid; never mealy or tough. Kentucky Wonder has won first prize over such well known and popular sorts as Ironclad, Cuban Queen, Kolb's Gem, etc. Oz 10c, ¼ lb 20c, lb 60c.

Phinney's Early—A valuable variety, hardy and a sure cropper. Vines vigorous and productive, fruiting quite early; fruit medium size, oblong, smooth marbled with two shades of green; rind thin, flesh pink, very sweet, tender and crisp. Pkt 5c, oz 10c, ¼ lb 20c, lb 50c.

Peerless, or Ice Cream—The best melon for private gardens and for market gardeners who deliver direct to consumers, but is also grown extensively in some sections for shipping in carload lots distances of two or three hundred miles. Vines moderately vigorous, hardy, productive; fruit medium size, oval, finely mottled; rind thin; flesh bright scarlet, solid to the center, crisp, tender, and of the highest flavor. Pkt 5c, oz 10c, ¼ lb 20c, lb 50c.

Black Spanish—Vines small, so that they may be planted closer than most sorts. Fruit round, very dark green, with sweet scarlet flesh and black seed. It is not so large as some of the other sorts, but is very hardy and a certain cropper. Pkt 5c, oz 10c, ¼ lb 20c, lb 50c.

Gypsy, or Georgia Rattlesnake—One of the largest varieties, and stands shipment long distances. Fruit cylindrical, square at the ends, smooth, distinctly striped and mottled light and dark green. Flesh bright scarlet and very sweet. Pkt 5c, oz 10c, ¼ lb 20c, lb 50c.

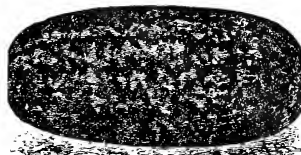
Cuban Queen—Fruit medium size to large, globular or oval; skin striped light and dark green in sharp contrast; rind medium thick, but stands shipment well. Flesh bright red, solid, very

crisp and sugary. Pkt 5c, oz 10c, ¼ lb 20c, lb 50c.

Dixie—A popular market sort. Vines vigorous, large growing and hardy; fruit medium size to large, about one-third longer than thick. Color of skin dark green striped with a lighter shade; rind thin but tough; flesh bright scarlet, ripens closely to the rind, is of the best quality and free from the hard, coarse center which is so objectionable a feature of many shipping melons. Pkt 5c, oz 10c, ¼ lb 20c, lb 50c.

Round Light Icing—Fruit medium size, round, very light green or white, mottled with slightly darker green. Flesh bright, light red, very sweet and tender. By many this is considered the best of all melons. Pkt 5c, oz 10c, ¼ lb 20c, lb 50c.

Dark Icing—Fruit is large, nearly round, dark green, very indistinctly mottled with



lighter shade. Flesh very rich, bright red. The juice, which is very abundant, is of rich, deep color and flows so freely as to be available as a drink. All of our stocks of Icing Melon are pure and perfectly distinct, showing very uniformly the characteristics of each sort as described. Repeated trials have demonstrated that our stock of the Icing varieties are very much more pure and distinct than those obtainable elsewhere. Pkt 5c, oz 10c, ¼ lb 20c, lb 50c.

Kolb's Gem—Vines of medium size, but remarkably vigorous and healthy. Leaves of medium size, deeply cut with a peculiar frilled edge. Fruit of the largest size, round or slightly oval, marked with irregular mottled stripes of dark and light green. Outer rind or shell exceedingly hard and firm, making it a popular sort for shipping long distances. Flesh bright red, solid, a little coarse, but sweet and tender. Seeds dark gray. Pkt 5c, oz 10c, ¼ lb 20c, lb 50c.

Boss—The very dark green long fruit has very bright red, exceedingly sweet flesh, extending to within one-fourth inch of the rind.

A splendid sort for the home garden, but too thin rinded for shipping. Pkt 5c, oz 10c, ¼ lb 20c, lb 50c.

Mountain Sweet—A large, oval variety; rind green; flesh scarlet and quite solid to the center, very sweet and delicious. This is an old standard sort, and one of the best for the home garden. Pkt 5c, oz 10c, ¼ lb 20c, lb 50c.

MUSTARD

White English—The leaves are light green, mild and tender when young; seed light yellow. Pkt 5c, oz 10c, ¼ lb 15c, lb 40c.

Southern Giant Curled—This mustard is very highly esteemed in the South, where the seed is sown in the fall, and the plants used very early in the spring as a salad. Our stock is the true curled leaf. The seed is brown and produces plants which often grow two feet high and of great breadth, forming enormous bunches. Pkt 5c, oz 10c, ¼ lb 15c, lb 50c.

OKRA

Culture—Sow the seed thinly in dry, warm soil, in shallow drills two feet apart. After the plants are up, thin them out to nine inches apart; hoe frequently and draw a little earth to the stems as they continue to grow. Gather the pods when quite green, and about an inch and a half long.

White Velvet—This variety is a great improvement on the old White or the Green. The plant is of medium height, bearing a large crop of white, smooth, tender pods, which retain their tenderness until nearly full size. Pkt 5c, oz 10c, ¼ lb 15c, lb 50c.

Dwarf White—The longest podded variety. Two feet high, very productive, mature pods a foot long, very thick and fleshy. Pkt 5c, oz 10c, ¼ lb 15c, lb 50c.

ONIONS



Culture.—Seed should be sown as soon as the ground can be gotten ready, and can be done best by a hand seed drill. This should be carefully adjusted (testing it by running it over the barn floor), to sow the desired quantity of seed and about one-half inch deep. The quantity needed will vary with the soil, the seed used and the kind of onions desired. Thin seedling gives much larger onions than thick. Four or five pounds is the usual quantity needed to grow large onions. We use a drill with a roller attached, but if the drill has none, the ground should be well rolled with a hand roller immediately after the seed is planted.

Australian Brown—(See back of cover.)

Globe Weathersfield—Something new, that is not simply a novelty. A very meritorious onion, and one that we can honestly recommend for general use. It has all the good qualities of the well-known Red Weathersfield and is much earlier. Perfectly globular in shape, with very small neck; smooth and very uniform in size. A splendid keeper, always sweet and tender. Our stock of seed comes direct from the propagator and is of the purest strain. Pkt 10c, oz 25c, ¼ lb 85c, lb \$3.00.

Yellow Danvers, or Long Keeper—This is the variety planted almost exclusively in the Northwest for the reason that the crop can be kept in good condition through our long, wet, warm winters. Many cars of this variety went East the past season in May after the Eastern California crops were

rotted and out of the way. While the Mammoth Silver King and Prizetaker are far more profitable for a home market, that is a retail trade, because they command a fancy price, still we advise the Yellow Danvers for general crop. Pkt 5c, oz 15c, ¼ lb 30c, lb \$1.00.

Yellow Globe Danvers—The ideal Danvers onion was originally oval or nearly flat, and it has been thought by many that its small neck and splendid ripening habit could only be obtained in onions of that shape, but by careful selection and breeding developed a strain having to a remarkable degree the ripening habit and small neck of the original Danvers and yet decidedly globular in form, thus giving larger yields and handsomer bulbs without sacrificing any of the good qualities of the most popular of yellow onions. A trial will convince the most conservative planter that this is a real improvement. Pkt 5c, oz 10c, ¼ lb 30c, lb \$1.00.

Prizetaker—This onion is perfectly globe-shaped, with bright straw-colored skin; the necks are very small and the onions always ripen up hard. An excellent keeper, exceedingly fine flavor, grows to an enormous size, onions weighing six pounds having been grown from seed the first year. The prize onion of this variety last year weighed six pounds and two ounces. Pkt 5c, oz 20c, ¼ lb 60c, lb \$1.75.

Extra Early Red—A medium sized flat variety; an abundant producer, and very uniform in shape and size; moderately strong flavored, and comes into use nearly two weeks earlier than the Large Red Weathersfield; very desirable for early market use. Pkt 5c, oz 15c, ¼ lb 40c, lb \$1.40.

Large Red Weathersfield—This is the standard red variety. Large size, skin deep purplish-red, firm round, somewhat flattened, flesh purplish-white, moderately fine grained, and stronger flavored than any of the other kinds. Very productive, the best keeper, and one of the most popular for general cultivation. Pkt 5c, oz 15c, ¼ lb 40c, lb \$1.50.

Southport Red Globe—A very productive variety, of medium

size, small neck, bright purplish color; good keeper and always a good seller. Oz 25c, ¼ lb 50c, lb \$1.75.

Mammoth Silver King—In appearance this is the most striking onion grown. We hardly know which to commend the most, its large size, symmetrical appearance and beautiful silvery flesh, or its sweetness, tenderness and mild flavor. These qualities make it not only the best for exhibition and fancy high-priced trade, but for the home table it is unsurpassed. Pkt 5c, oz 20c, ¼ lb 60c, lb \$2.00.

White Portugal, or American Silverskin—A large, flat onion of mild flavor, fine for early winter use, and much esteemed for pickling. It is the best keeper of the white varieties. Pkt 5c, oz 25c, ¼ lb 75c, lb \$2.25.

White Barletta—A new kind, earlier than the Queen, producing small flat bulbs; a fine variety for sets and superior for pickling. Oz 15c, ¼ lb 60c, lb \$2.00.

White Silverskin—The bulbs are comparatively small and very white. Grow rapidly when young. Very valuable for bunching. Pkt 5c, oz 15c, ¼ lb 50c, lb \$1.50.

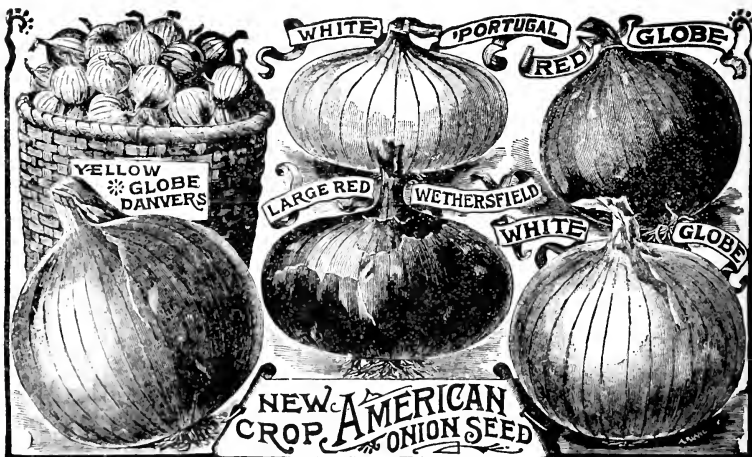
White Globe—Yields abundantly, producing handsome and uniformly globe-shaped bulbs. The flesh is firm, fine-grained, and of mild flavor. Sometimes called Southport White Globe. Pkt 5c, oz 25c, ¼ lb 75c, lb \$2.25.

FOREIGN ONIONS

The following varieties have been tested in this country, and have given perfect satisfaction. The flavor of the Italian varieties is mild, and they are every way well adapted to culinary purposes.

Queen—A silver-skinned variety, of quick growth and remarkable keeping qualities. If sown in early spring it will produce onions one to two inches in diameter early in summer, and if sown in July, with favorable weather, be ready to pull late in autumn, and be sound and fit for use until the following summer. Particularly valuable for pickles. If sown thickly, they will mature perfect, hard onions from one-half to three-quarters of an inch in diameter. Pkt 5c, oz 15c, ¼ lb 65c, lb \$1.50.

Giant White Italian Tripoli—A large, beautiful, pure white, flat onion of mild and excellent flavor. Will produce a some-



what larger onion from seed than our White Portugal; but to attain their full size the plants should be started very early in a hot-bed and set out in rich soil. Pkt 5c, oz 10c, ¼ lb 60c, lb \$2.

Giant Rocca—An immense onion. Globular in form, skin light brown, flesh mild and tender. It will produce a large onion from seed the first season, but to attain the largest growth, very small bulbs or sets should be set out the second spring, when they will continue increasing in size instead of producing seed, as is the case with American onions. Pkt 5c, oz 20c, ¼ lb 75c, lb \$2.50.

BULBS OR SETS

Top Sets, or Buttons—These produce on the top of the stalk instead of seed, a number of small bulbs or onions, about the size of acorns, which, if planted, will produce a large onion, maturing earlier than from seed. The large onion produces the top onion, and the little top onion produces the large onion. Pkt 20c lb postpaid; by express 20c, or 5 lbs 80c.

Yellow Button Sets—30c lb postpaid; by express 20c, or 5 lbs 80c.

PARSNIP

Culture.—They do best on deep, rich, sandy soil, but will make good roots on any soil which is deep, mellow and moderately rich, but fresh manure is apt to make the roots coarse and ill shaped. As the seed is sometimes slow to germinate, it should be sown as early as possible, in drills two feet to two and one-half feet apart; cover one-half inch deep, and press the soil firmly over the seed; give frequent cultivation, and thin the plants four to the foot.

Long White Dutch, or Sugar.—Roots very long, white, smooth, tender, sugary and of most excellent flavor. Very hardy, and will keep through winter without protection. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 50c.

Hollow Crown or Guernsey.—Roots comparatively short, ending somewhat abruptly with a small tap root; grows mostly below the surface; has a very smooth, clean skin, and is easily distinguished by the leaves arising from a depression on the top or crown of root. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 50c.

PEAS

Culture.—For early peas the soil should be light, warm and sheltered, but for general crop a moderately heavy soil is better. Fresh manure, very rich or wet, mucky soil should be avoided, as they cause a rank growth of vine at the cost of the quality of the peas; such soil is often the cause of the early sorts maturing unevenly. Sow as early as possible a few of the earliest varieties on warm, quick soil, prepared the fall before. The general crop can be delayed until later, but we have met with better success from sowing all the varieties comparatively early, depending for succession upon selecting sorts that follow each other in ripening. The peas will mature earlier if covered only one inch deep, and where earliness is the most important thing, they may be treated in that way, but larger pods and more of them will be produced if the seed is planted in trenches three to six inches deep, covered with one or two inches of soil until the plants are above the surface, then filling the trenches; this will secure deep rooting, prevent mildew and prolong the bearing season. If the peas are covered to the full depth at first, or if water is allowed to stand in the trenches, they will not make a good stand of healthy plants.

EXTRA EARLY SORTS

Earliest of All, or Alaska.—Smooth, blue pea, which in evenness of growth of vine and early maturity of pods is unequalled by any other extra early pea. Vines two to two and one-half feet high, unbranched, bearing four to seven long pods, which are filled with medium-sized, dark-green peas of excellent flavor. Pkt 10c, lb 15c.

First and Best.—By most careful comparison we are convinced that this is the earliest and most even stock of white extra early peas in existence, maturing so well together that a single picking, or at most, two, will secure the entire crop. Vines vigorous and hardy, two to two and one-half feet high, unbranched, bearing three to seven straight pods, having five to seven medium-size, smooth peas of good quality. Dry pea medium size, smooth, yellowish-white. Pkt 10c, lb 15c.

American Wonder.—A variety whose stout, branching vines only grow about nine inches high, and are covered with long, well-filled pods, containing seven or eight large, exceedingly sweet, tender and well-flavored peas, nearly as early as First and Best. Dry pea medium size, much wrinkled and flattened, pale green. We have taken great pains in growing our stock, and know it to be pure and true. Pkt 10c, lb 15c.

Nott's Excelsior.—This variety is nearly as early as the American Wonder, and the vine is decidedly larger, growing to a height of from 12 to 15 inches, and bearing an immense crop of pods, which are larger and invariably well filled with peas of the best quality. The dry peas are green, large, wrinkled, often flattened. Market gardeners use more of this sort than of any other wrinkled pea. Pkt 10c, lb 20c.

McLean's Little Gem.—A very desirable, early dwarf, green, wrinkled variety, growing about fifteen inches high. When in a green state it is very large, sweet and of delicious flavor. Pkt 10c, lb 14c.

SECOND EARLY SORTS

McLean's Advancer.—A green wrinkled variety, about two and a half feet high, with broad, long pods, which are abundantly produced and well filled to the end. Considered by some the best of its season, which is directly after Premium Gem, and is of most excellent flavor. This pea is used very extensively by the market gardeners in the vicinity of New York, on account of its great productiveness, the fine appearance of its pods, and its fine flavor. It is very largely used among canners, as the skin will stand cooking without breaking. After careful comparison with other stocks we are convinced that ours is the best. Pkt 10c, lb 14c.

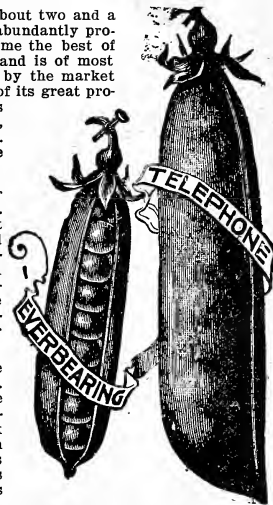
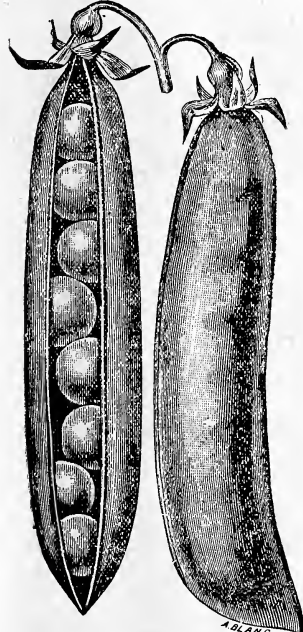
Biss's Everbearing.—A variety maturing soon after the Gems, and continuing a long time in bearing. Vine stout, about eighteen inches high, bearing at the top six to ten broad pods. If these are removed as they mature, and the season and soil are favorable, the plant will throw out from the axil of each leaf, branches bearing pods which will mature in succession, thus prolonging the season. The large wrinkled peas cook very quickly, are tender, of superior flavor, and preferred by many to any other sort. Pkt 10c, lb 20c.

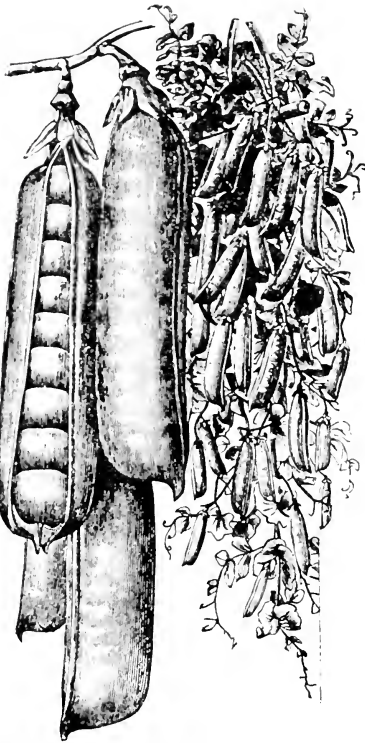
Telephone.—This pea has proved to be a valuable acquisition. Vines large, with large, coarse leaves. Pods very large, filled with immense peas, which are tender, sweet, and of excellent flavor. Notwithstanding the large amount of inferior and spurious stock which has been sold, no pea of recent introduction has gained more rapidly in popularity than this, thus showing that it has sterling merit, which gardeners appreciate. The stock we offer is prolific and has been carefully selected. Pkt 10c, lb 15c.

LATER SORTS

Yorkshire Hero.—Vines stout, about two feet high, bearing at the top a number of broad pods filled with large peas, which keep a long time in season, and never become as hard as most sorts. They are of fine quality and will be preferred to any other by those who like a rich, marrow-like pea. Pkt 10c, lb 12 $\frac{1}{2}$ c.

Improved Stratagem.—A sort in which the good qualities which gave the old Stratagem its popularity, are so developed as to make this a distinct variety. We do not hesitate to pronounce this by far the best of the large podded peas; the pods are of immense size, uniformly filled with very large, dark green peas of the finest quality; vine medium height, but stocky, with





broad, light green leaves, and bearing an abundance of large, handsome pods; one of the very best varieties for market gardeners. Pkt 10c, lb 20c.

Champion of England—Universally admitted to be one of the richest and best flavored peas, and very productive. Height four or five feet; seed whitish-green and much shriveled. Very inferior and mixed stocks of this sort are often offered, but when the seed is as well grown and selected as that we offer, we consider this variety equal in quality to any in cultivation, and the best of its season, either for the amateur or market gardener. Pkt 10c, lb 12½c.

Abundance—A second early variety, attaining a height of three feet. Pods 3 to 3½ inches long, roundish and well filled, containing six to eight large wrinkled peas of excellent quality. This variety is remarkable for branching directly from the roots. Pkt 10c, lb 15c.

Large White Marrowfat—Cultivated very extensively for the summer crop. About five feet high, of strong growth. Pods large, cylindrical, rough, light colored and well filled; seeds large, smooth, round and yellow or white, according to the soil in which they are grown. It is excellent for summer use, but inferior in quality to the new sorts, although undoubtedly one of the most productive of the garden varieties. Pkt 5c, lb 12½c.

Large Black Eye Marrowfat—An excellent variety, growing about five feet high; pods large; a prolific bearer, and can be recommended as one of the very best Marrowfat sorts. Pkt 10c, lb 12½c.

FIELD PEAS

Canadian, Blue Russian, Wrinkled, Swiss—Market price.

EDIBLE POD OR SUGAR

Melting Sugar—Grows to the height of five feet, bears a profusion of large, broad pods, which are so brittle that they snap without any string. It should be used in much the same way as a Wax bean. The pods when cooked are very sweet and tender. Pkt 15c, lb 25c.

Very Dwarf Sugar—Unusually dwarf, very similar in habit to the American Wonder. The pods are beautifully crimped, are of unusual size for such a small-growing sort, and are of exquisite, melting quality. Pkt 15c, lb 25c.

PEPPER

Culture—The same as for egg plant; the plants need quite as much heat to perfect them, but mature sooner and may be sown later, or even planted out of doors after warm weather has fairly set in. Chuan, hen dung, or any other bird manure, hoed into surface soil when the plants are about six inches high, will wonderfully increase the product and also improve the quality of the fruit.

Red Cherry—Plant tall, bearing a profusion of bright red, round fruit, which is very pungent when ripe. The plant is very handsome and an ornament to the garden. Pkt 5c, oz 25c, ¼ lb 75c, lb \$2.25.

Red Chili—Used in the manufacture of pepper sauce. Pods sharply conical and exceedingly pungent when ripe. Requires a long, warm season. The plants should be started quite early in hot bed. Pkt 5c, oz 25c, ¼ lb 75c, lb \$2.25.

Ruby King—An improved American sort reaching the largest size, yet retaining the symmetrical shape of the smaller sorts. It is very bright colored; beautiful, sweet and mild flavored and one of the best for stuffed pickles. Pkt 5c, oz 25c, ¼ lb 75c, lb \$2.25.

Large Squash—Fruit large, flat, tomato shaped, more or less ribbed; skin smooth and glossy; flesh mild, thick meaty and pleasant to the taste, although possessing more pungency than the other large sorts; very productive and the best variety for pickling. One of the earliest and most certain to mature. Pkt 5c, oz 25c, ¼ lb 75c, lb \$2.25.



Long Red Cayenne—A long, slim, pointed pod, and when ripe of a bright red color. Extremely strong and pungent. Pkt 5c, oz 25c, ¼ lb 75c, lb \$2.25.

Golden Dawn—Plants quite dwarf, but very prolific. Fruit medium size and of inverted bell shape, rich, golden yellow color, with very thick, sweet, mild flavored flesh. Pkt 5c, oz 25c, ¼ lb 75c, lb \$2.25.

Large Bell or Bull Nose—A very large sort of inverted bell shape, suitable for filling or for a mixed pickle. Flesh thick, hard and less pungent than most other sorts. Pkt 5c, oz 25c, ¼ lb 75c, lb \$2.25.

Sweet Mountain—Plants very vigorous and productive, growing upright, with moderately large leaves. Fruit very large, long, often eight inches or more in length, by two or three in diameter; very smooth and handsome, being when green of a bright, deep green color, entirely free from any purple tinge, and when mature, of a rich red. Flesh very thick, sweet and mild flavored. Well suited to use as a stuffed pickle. Pkt 5c, oz 25c, ¼ lb 75c, lb \$2.25.

PUMPKIN

The pumpkin more properly belongs to the farm than the garden, especially as it readily mixes with and injures the quality of the squash.

Culture—Pumpkins are not so particular in regard to soil as melons or cucumbers, but in other respects are cultivated the same, though on a larger scale. They are generally raised between hills of corn, but may be planted with success in fields by themselves.

Mammoth Potiron Pumpkin—The king of all Pumpkins. Has been grown to weigh over 225 pounds, and in France, where it is from, it is said to reach the enormous weight of 300 pounds. It has a salmon-colored skin, flesh bright yellow, fine grain, and of excellent quality, a splendid keeper. It is truly a colossal variety, and if you wish to astonish your neighbors and win first prize at county or state fair, do not fail to include a packet of Mammoth Potiron Pumpkin in your order. Pkt 10c, oz 15c, ¼ lb 50c, lb \$1.50.

Pie—Although introduced as Pie Squash we consider this a true Pumpkin, and a real acquisition. Fruit small, nearly round. Smooth yellow skin, covered with gray netting. Fruit very thick, sweet and fine flavored. Makes very delicious pies. Pkt 5c, oz 10c, ¼ lb 15c, lb 50c.

Large Yellow—Grows to a large size and is adapted for cooking purposes and feeding stock. It is irregular in shape and size, some being depressed and flattened at the ends, others round or elongated; of deep, rich, yellow color, of fine grain and excellent flavor. Pkt 5c, oz 10c, ¼ lb 15c, lb 50c.

Sweet Cheese, or Kentucky Field—By far the best variety for planting in the South. Large, oblong, mottled, light green and yellow, with very thick, sweet, tender yellow flesh. Pkt 5c, oz 10c, ¼ lb 15c, lb 50c.





Culture.—For the home garden sow on rich, sandy soil as early in the spring as it is fit to work. For forcing sow in hot-beds, having very rich, sandy soil, made perfectly level, scattering evenly over the whole surface from sixty to one hundred and fifty seeds to the square foot. Cover with one-half inch of soil sifted on, and attend carefully to the watering and airing. If the bed is a good one the whole crop can be marketed in twenty-one to thirty days after planting. In open ground culture sow in drills twelve inches apart and thin to such a distance in the row as to prevent crowding. A good dressing of nitrate of soda will greatly stimulate growth and insure tender, brittle roots. Successional sowings from one week to ten days apart will keep up a supply. After the hot weather of summer begins it is better to sow the summer and winter varieties, as they do not become tough and stringy nor pithy so quickly as the early sorts.

EXTRA EARLY VARIETIES—TURNIP SHAPED.

Early Scarlet Turnip—This has as small a top and is as early as any variety in cultivation, making it one of the best for forcing. Roots fit for use may be had in three weeks or less from time of sowing. Roots small, globular, deep rich red color; flesh white, crisp and tender when young. May be planted very closely, owing to its small tops. Pkt 5c, oz 10c, ¼ lb 20c, lb 65c.

Early Scarlet Turnip, White Tipped—One of the handsomest of the turnip radishes and a great favorite in many large markets, for early planting outdoors. While it is not a distinctively forcing radish, it is but little later than the best of that class, and will give entire satisfaction, where extreme earliness is not the primary object. Roots slightly flattened on the under side, color very deep scarlet with a white tip, flesh white and of the best quality. We recommend this as one of the best for early planting, either for home or market use. Pkt 5c, oz 10c, ¼ lb 20c, lb 65c.

Rosy Gem—The favorite variety for outdoor cultivation. Medium size, uniform shape, color bright scarlet, sharply contrasting with white tip, which makes it most attractive. It grows quickly, maturing in twenty-five days. Pkt 5c, oz 10c, ¼ lb 20c, lb 55c.

Early White, Turnip Rooted—A little flatter than the Scarlet Turnip Rooted and pure white in color. It has a very small top; white, semi-transparent flesh, and is slightly later than the Scarlet Turnip in maturing, but will stand more heat and remain longer in condition for use. An inferior strain is often sold under the name of White Boy. Pkt 5c, oz 10c, ¼ lb 20c, lb 65c.

OLIVE SHAPED.

Early Scarlet, Olive Shaped—In the form of an olive, terminating in a very slim tap root. Skin scarlet; neck small; flesh rose colored, tender and excellent. Early and well adapted for forcing or general crop. Pkt 5c, oz 10c, ¼ lb 20c, lb 65c.

Early White, Olive Shaped—Differs from the Scarlet Olive Shaped in color and in being a little longer. The roots, when well grown, are clear white. Pkt 5c, oz 10c, ¼ lb 20c, lb 65c.

French Breakfast—A medium sized radish, olive shaped, small top, of quick growth, very crisp and tender, of a beautiful scarlet color, except near the tip, which is pure white. A splendid variety for the table, on account of its excellent quality and its beautiful color. Pkt 5c, oz 10c, ¼ lb 20c, lb 65c.

LONG VARIETIES.

Long Brightest Scarlet, White Tipped—The brightest and handsomest scarlet color we have seen in any radish. We think this variety is a decided improvement in earliness and color over other varieties of this class. It makes roots fit for use in about twenty-five days, when planted outdoors. It has a small top and no tendency to neckiness. It may also be used for forcing; grows to the same size as Wood's Early Frame. Market gardeners should use this for early planting, as its color

alone will make it sell. Pkt 5c, oz 10c, ¼ lb 20c, lb 65c.

Early Long Scarlet, Short Top, Improved—This is a standard variety for private garden or market use, particularly for outdoor culture. It grows six or seven inches long, half out of the ground, is uniformly straight and smooth; is very brittle and crisp, and of quick growth; color bright scarlet; top small. Pkt 5c, oz 10c, ¼ lb 20c, lb 65c.

Improved Chartier—Although this American variety is too strong growing to be used for forcing, it is one of the very best for sowing outdoors. The roots come to usable size very early, remaining hard and crisp until they reach a diameter of one and one-half or two inches, and so furnish good roots two or three times as long as any of the above. Roots scarlet-rose above, shading into white at the tip. They are long, cylindrical for the upper two-thirds, and then gradually taper to the tip. Flesh white, crisp and mild flavored. Pkt 5c, oz 10c, ¼ lb 20c, lb 65c.

Long White Vienna, or Lady Finger—Earlier than the last, with straight, smooth, white roots; flesh white, very tender, crisp and juicy. Pkt 5c, oz 10c, ¼ lb 20c, lb 65c.

Long Black Summer—In this distinct sort we have a true summer radish, which may be planted from March to July and treated in every way as any other, and if planted late is as good in every respect for winter use as the Long Black Spanish Winter. Top very much smaller than that variety; roots a little shorter, more symmetrical, and smoother skin; tapers more abruptly at the tip; color of skin much deeper black; flesh as white and firm; flavor about as pungent. The handsomest black radish, and is worthy of a thorough trial. Pkt 5c, oz 10c, ¼ lb 20c, lb 65c.

White Strasburg—This grows to the largest size and is usable when quite small, thus covering a long season. The mature roots are four to five inches long and about two inches thick; very white; the flesh is exceedingly crisp and tender. One of the best of the large summer sorts. Pkt 5c, oz 10c, ¼ lb 20c, lb 65c.

Early White Giant Stuttgart—Root large, often four inches in diameter, top shaped. Skin white; flesh white and crisp, and not becoming strong or pithy until very late, so that those not used as a summer radish can be stored for winter use. Pkt 5c, oz 10c, ¼ lb 20c, lb 65c.

WINTER VARIETIES.

Culture.—Sow about the same time as winter turnips, on light, rich soil, in drills eighteen inches apart; give frequent cultivation, and thin two to six inches apart, according to size of the variety. For winter use pull before severe frost, and store in damp sand in cellar.

Scarlet China, Winter—Roots cylindrical, or largest at the bottom, tapering abruptly to a small top. Skin very smooth and of a bright rose color; flesh firm, like the Black Spanish, but more pungent. Pkt 5c, oz 10c, ¼ lb 25c, lb 80c.

California Mammoth White China, Winter—First introduced into this country by the Chinese in California. It is pure white, about one foot long and two or three inches through, tapering regularly to the tip. The flesh is tender and crisp, keeping well through the winter. Pkt 5c, oz 10c, ¼ lb 25c, lb 80c.

Long Black Spanish, Winter—One of the latest as well as the hardest of the radishes; an excellent sort for winter use. Roots oblong, black, of very large size and firm texture. Pkt 5c, oz 10c, ¼ lb 20c, lb 65c.

Round Black Spanish, Winter—Roots round, sometimes top-shaped, three or four inches in diameter; skin black; flesh white, very compact and highly flavored. An excellent sort for winter, as the roots keep a long time. Pkt 5c, oz 10c, ¼ lb 20c, lb 65c.

RHUBARB, OR PIE PLANT

Victoria—Pkt 5c, oz 10c, ¼ lb 40c, lb \$1.25.

Giant—Pkt 5c, oz 15c, ¼ lb 40c, lb \$1.25.

Linnaeus—Pkt 5c, oz 15c, ¼ lb 40c, lb \$1.25.

Rhubarb Roots—15c each, \$1 per doz by express; by mail, prepaid, 25c each, \$2 per doz.

SPINAGE

German, Spinat.

French, Epinard.

Culture.—Should be planted in very rich ground, the richer the better. Sow in drills one foot apart and commence thinning out the plants when the leaves are an inch wide. All should be cut before hot weather, or it will be tough and stringy. For early spring use the seed should be sown early in autumn. In the north the plants will require a slight protection of leaves or straw, but in the southern states no protection is necessary, and they will continue their growth most of the winter.

The Spinach is very hardy, extremely wholesome and palatable, and makes a delicious dish of greens, retaining its bright green color after cooking.

Round Summer—This variety is generally preferred for early spring sowing, and is the most popular with our market gardeners; the leaves are large, thick and fleshy, not quite so hardy as the Prickly Winter, but stands the winter very well. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 15c, lb 35c.

Savoy Leaved—The earliest variety and one of the best to plant in autumn for early spring use. Plant of upright growth, with narrow, pointed leaves, which are savoyed like those of cabbage. It grows quickly to a suitable size for use, but soon runs to seed. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 15c, lb 35c.

Improved Thick Leaved—An improvement on the preceding, with larger and thicker leaves, and of more substance. Particularly recommended for market garden use. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 15c, lb 35c.

Long Standing—An improved round seeded strain of excellent merit, having all the good qualities of the ordinary sorts. It is especially desirable because it goes to seed much later than any other variety. This will be highly appreciated by market gardeners. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 15c, lb 35c.

Long Standing Prickly—The plants mature a little later than the round leaved sorts, but furnish a large quantity of very thick and well flavored leaves. This is one of the best sorts for market gardeners. Has prickly seed. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 15c, lb 35c.

Prickly Winter—The hardest variety, and will withstand the severest weather, with only a slight protection of leaves or straw. The seed is prickly, leaves triangular, oblong or arrow shaped. It is employed for fall sowing, which in this latitude is made about the first of September. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 15c, lb 35c.

SQUASH

Culture.—The plants are very tender and sensitive to cold, and planting must be delayed until settled warm weather. The general principles of culture are the same as those given for cucumbers and melons, but the plants are less particular as to soil. The summer varieties should be planted four to six feet apart each way, and the winter sorts eight to ten. Three plants are sufficient for a hill. Care should be taken not to break the stems from the squashes intended for winter use, as the slightest injury will increase the liability to decay.

Early Yellow Bush Scallop—An early, flat scallop shaped variety, color yellow, flesh pale yellow and well flavored; very productive; used when young and tender. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 60c.



Early White Bush Scallop—Similar in form to the preceding, but with a clear white skin, and more tender and delicate flesh. By many considered the best of summer varieties. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 30c, lb 60c.

Mammoth Summer Crookneck—It is the best summer squash, and for these reasons: It is twice as large as the ordinary Summer Crookneck, far more warty, and several days earlier. This combination of earliness, large size and wartiness, which adds so much to its attractiveness, makes it altogether the most desirable squash for the market or private garden. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 60c.

White Summer Crookneck—Introduced in 1895. This novelty is the result of several years' careful selection and will be certain to give general satisfaction. The ivory white fruit of this new, distinct and beautiful variety always attracts attention, as it is much handsomer than the Yellow Summer Crookneck. It comes perfectly true, and has pleased all who have tried it. Our stock can be relied upon to produce fruits uniform in shape, form and color and unequaled in beauty and quality. Pkt 10c, oz 20c, $\frac{1}{4}$ lb 60c, lb \$2.00.

Mammoth White Bush Scallop—Many seedsmen have listed Mammoth White Bush Scallop Squash, but until this stock in 1895, there was no uniformly large, clear white scalloped squash in trade. We have carefully compared our stock with that obtained elsewhere and find it much superior, the fruit being larger, clear white and of handsome form. The best of the scalloped squashes. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 25c, lb \$1.00.



WINTER VARIETIES

Boston Marrow—A fall and winter variety, very popular in the Boston market. Of oval form; skin thin, when ripe, bright orange mottled with light cream color; flesh rich salmon yellow, fine grained, and for sweetness and excellence unsurpassed, but not as dry as the Hubbard. We have an unusually good stock of this sort. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 60c.

Early Prolific Marrow—A variety developed by selection from the Boston Marrow, but much earlier and the earliest of the winter varieties. Fruit small, of deep orange color netted with cream; shape similar to Boston Marrow, flesh thick, deep yellow, of fine quality. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 60c.

Hubbard—This is a superior variety, and the best winter squash known; flesh bright orange yellow, fine grained, very dry, sweet and rich flavored; keeps perfectly good throughout the winter; bolls or bakes exceedingly dry, and is esteemed. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 60c.

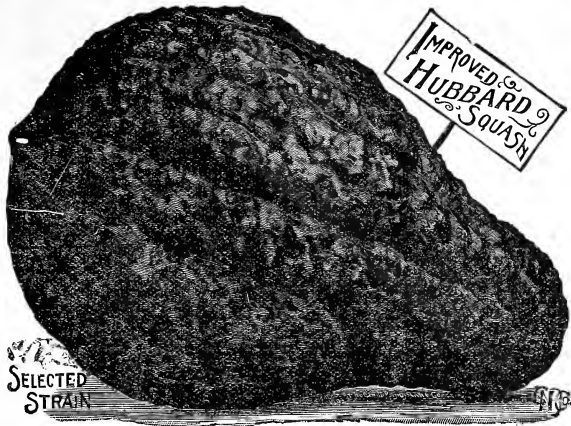
Warted Hubbard—A Hubbard squash, large, blackish green, hard as wood, with warty knobs all over it, satisfies even the inexperienced observer that it is rich in quality, a keeper and thick fleshed. Such will sell at sight, while ordinary small, irregular, poorly colored specimens stay on the stand until they rot. This strain has become very popular. Oz 10c, $\frac{1}{4}$ lb 25c, lb 80c.

Mammoth Chili—An exceedingly large variety; 200-pound specimens adorn our exhibitions and amaze the visitors. It affords palatable food for both man and beast. Oz 15c, $\frac{1}{4}$ lb 35c, lb \$1.00.

SUGAR CANE

See Grain and Field Seed page.

OUR 1901 HUBBARD



The
Purest Strain
..of..
Hubbard
Squash
Ever Offered

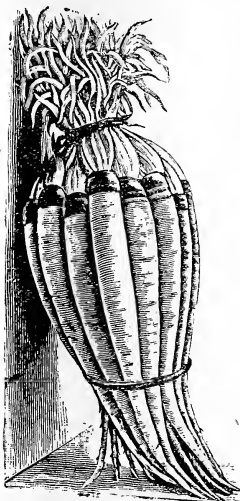
We have taken the utmost care in selecting this Seed and guarantee it to be the purest stock of Hubbard Squash that can be had anywhere.

Its keeping qualities are unsurpassed, also its flavor, and its flesh is bright and of exceedingly fine grain.

It yields not small, ill-shaped Squashes, but every one is large and uniform in shape. Its shell is very thin and brittle.

A large package of this superior strain for 10c; 1 oz., 20c; 1-4 lb., 40c; 1 lb., 75c.

Salsify, or Vegetable Oyster

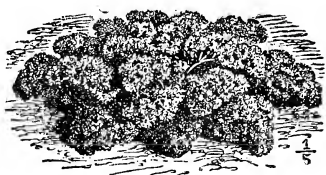


Culture.—It succeeds best in light, well enriched soil which should be stirred to a good depth. If it is necessary to use manure, it should be very fine and well rotted, for if it is fresh and coarse the roots will grow irregular and ill-shaped. Sow early and quite deep, giving the general culture recommended for parsnip. The roots are perfectly hardy and may remain out all winter, but should be dug early in spring, as they deteriorate rapidly after growth commences. Store a quantity for winter use in a pit, or in a cellar in damp earth or sand.

Large White.—The old sort. Roots medium size, smooth; flesh white. Pkt 5c, oz 10c, ¼ lb 30c, 1b \$1.00.

Mammoth Sandwich Island—This is in every way superior to the old sort, being larger, stronger growing and less liable to branch. Invaluable to market gardeners. Pkt 5c, oz 15c, ¼ lb 40c, 1b \$1.25.

PARSLEY



Culture.—It requires rich mellow soil. The seed is even slower than parsnip in germinating, and should be sown as early as possible in the spring, in drills one foot apart, and when the plants are well up, thin to one foot in the row. When the leaves become old and dull they may be cut off and the plant will start a new growth, which will be brighter and better curled. The fern leaved and moss curled varieties make beautiful border plants.

Plain.—Leaves plain or flat and very dark colored. It is often preferred on this account because of its hardness. Pkt 5c, oz 10c, ¼ lb 20c, 1b 60c.

Champion Moss Curled.—A compact growing, finely cut and much curled variety, of a bright green color. Owing to its fine color and density of foliage it is much sought after. Pkt 5c, oz 10c, ¼ lb 20c, 1b 60c.

Fine Triple Curled, or Myatt's Garnishing.—A fine free growing but not large variety. The plants bear a great number of leaves, which are so abundant and so finely curled that they resemble a bunch of moss. The leaves are bright, pale green, and exceedingly handsome. Greatly prized for garnishing and table decoration. One of the best for market or private gardens. Pkt 5c, oz 10c, ¼ lb 20c, 1b 60c.

Turnip Rooted, or Hamburg.—The root, which resembles a small parsnip, is the edible portion of this variety, which is extensively grown and used for flavoring soups, etc. Pkt 5c, oz 10c, ¼ lb 20c, 1b 60c.

TOMATO

Culture.—Tomatoes do best on light, warm, not over rich soil, and success depends upon securing a rapid, vigorous, unchecked growth during the early part of the season. Sow in hot beds from six to eight weeks before they can be set out of doors, which is when danger from frost is past; when the plants have four leaves transplant into shallow boxes or cold frames, setting them four or five inches apart; give plenty of air, and endeavor to secure a vigorous, but steady and healthy growth, so that at the time of setting in the open ground they will be strong and stocky. Set out of doors as soon as danger from frost is over, but before doing so harden off the plants by gradually exposing them to the night air and by the withdrawal of water until the wood becomes hard and the leaves thick and of a dark green color. Transplant carefully and cultivate well as long as the vines will permit.

There are many other varieties offered by various seedmen and we know that some of them are of great excellence, but we have not found any that were superior to some on our list. We think a careful reading of the descriptions will enable one to select a sort from our list which will suit and be as good or better than can be procured elsewhere. But we do wish to call particular attention to these first two varieties mentioned, as we believe them to be nearer perfect than any other varieties ever offered.

Crimson Cushion—Is more symmetrical in shape and is thicker through from stem to "blossom end" than any other variety; in fact, so marked is this characteristic that it is frequently almost round. The color is brilliant scarlet crimson, untinged with purple, and ripens up almost completely to the stem. The Crimson Cushion, like the Ponderosa, is almost seedless, requiring from 10 to 12 bushels of ripe fruit to produce one pound of seed, whereas a pound of seed is realized from three bushels of ordinary tomatoes. These figures tell better than any description the "seedless" character of this grand variety. The flesh is firm and "meaty," and of superb quality. It is enormously prolific and early for so large a tomato. Pkt 10c, oz 25c, $\frac{1}{4}$ lb 75c, lb \$2.50.

Honor Bright—A distinct variety whose color changes during the ripening period are very beautiful. In its green state it is an almost white waxy green, changing to a bright lemon and from that to a light orange, and at maturity it is a bright red. A splendid cropper, quite early and hardy, and its solidity makes it a good shipper as well as a table variety. It is destined to become one of the most popular varieties for general purposes. Pkt 15c, oz 25c, $\frac{1}{4}$ lb 75c, lb \$2.50.

Atlantic Purple—The Atlantic Purple ripens up a large proportion of its crop the earliest of any. We do not hesitate to pronounce it the largest, smoothest, best flavored and brightest colored extra early tomato. Vine medium size, with few leaves, very hardy, bearing the fruit low down on the stem and in enormous clusters, which ripen all together. Those whose trade demands that they have a large, smooth, good flavored, very early fruit, will find this variety to be just what they want. Pkt 5c, oz 20c, $\frac{1}{4}$ lb 60c, lb \$2.00.

Early Michigan—There is no better variety than this for general market or family use. For smoothness and regularity of shape, uniformity of size, color and freedom from rot or cracking, this variety is unsurpassed. It is not only an extremely smooth and perfectly shaped tomato, but it is also very early, ripening its first fruit almost as early as any sort. Vines large, with dark green leaves; vigorous, large and wonderfully productive, being, under glass culture, one of the heaviest croppers; fruit medium size to large, and, unlike most varieties, grows larger as the season advances, perfectly smooth, solid, but without any core; deep, rich red color and of excellent flavor. This kind is admirably adapted to canners' use. Pkt 5c, oz 20c, $\frac{1}{4}$ lb 60c, lb \$2.00.

Optimus—One of the best table tomatoes, at least as far as quality is concerned. Vine medium size but vigorous, healthy and productive. Fruit medium size, oval, very smooth and of exceedingly bright, crimson-scarlet color. The flesh is of a crimson-scarlet color, quite distinct. It is also one of the best in flavor and entirely free from the hard spots found in so many others. Pkt 5c, oz 20c, $\frac{1}{4}$ lb 60c, lb \$2.00.

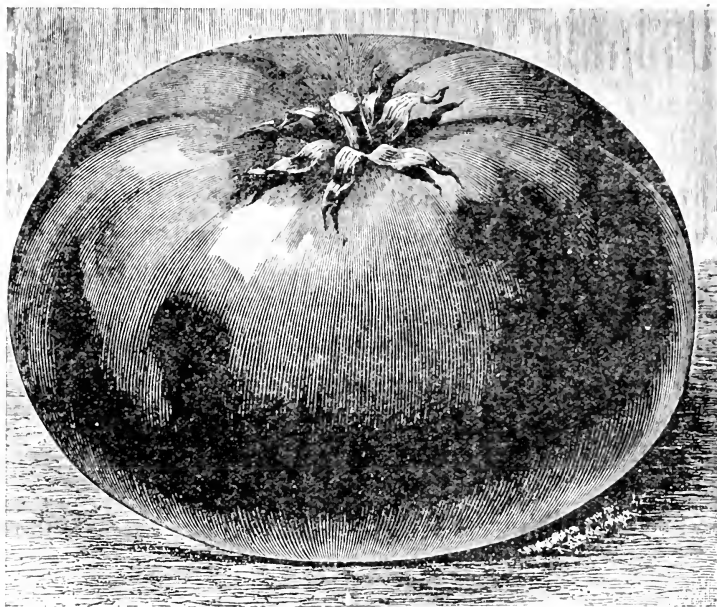
Favorite—Vine medium, with large, dark green leaves, having numerous clusters of three to seven large tomatoes, which are a

rich, dark red color, of oval outline, exceedingly smooth; flesh very firm, but without green spots. This is a favorite variety on account of its smooth, handsome fruit. Pkt 5c, oz 20c, $\frac{1}{4}$ lb 60c, lb \$2.00.

Royal Red—Vines stronger and more vigorous than the Favorite. The fruit is larger, brighter, deeper red and fully as good in quality. This is certainly a fine tomato for those who prize large size and bright color. Pkt 5c, oz 20c, $\frac{1}{4}$ lb 60c, lb \$2.

Trophy—Well known as one of the best. Vines of medium size, but producing compact clusters of fruit in immense quantities; fruit large, smooth, of bright red color, solid and of good flavor. Pkt 5c, oz 25c, $\frac{1}{4}$ lb 75c, lb \$2.50.

Perfection—A variety similar to the last, but an improvement upon it, being a little earlier, and invariably smooth and handsome. It is one of the handsomest tomatoes grown, and all who have tried it pronounce it of the highest quality. Has been used



very satisfactorily for forcing under glass. Pkt 5c, oz 20c, $\frac{1}{4}$ lb 60c, lb \$2.00.

PURPLE FRUITED SORTS

Ace—One of the smoothest and earliest in size and earliest of the purple fruited sorts. Vines large, hardy and productive, ripening its first fruit almost as early as any. Fruit in clusters of four or five, round, smooth and of good size; stands shipment remarkably well; flesh solid and of excellent flavor. This variety is especially for planting under glass. Pkt 5c, oz 20c, $\frac{1}{4}$ lb 60c, lb \$2.

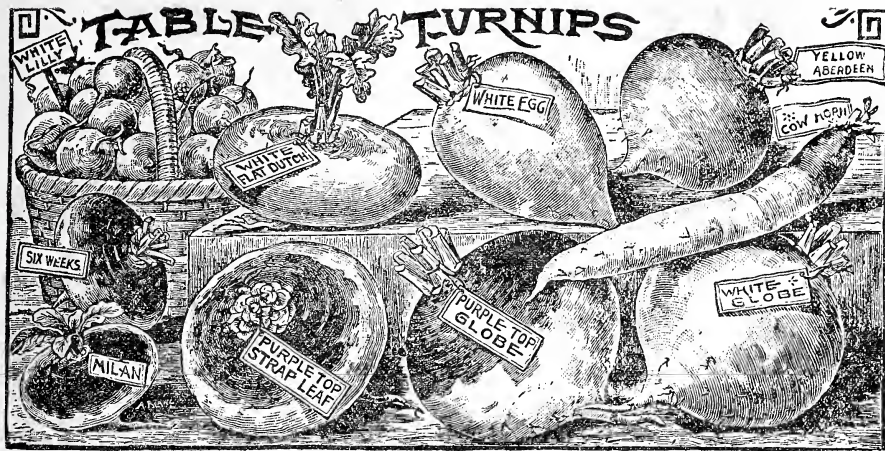
Essex Early Hybrid—Very similar to the Ace, fruit slightly darker purple, always smooth and handsome; quality among the best. Will certainly give satisfaction wherever the Ace does. Pkt 5c, oz 20c, $\frac{1}{4}$ lb 60c, lb \$2.00.

Dwarf Champion—This is a purple fruited variety which forms very stout, strong plants, about two feet high. This sort is often sold as Tree Tomato. Fruit smooth, medium size; color purplish-pink, fairly solid, but has no hard core, and is of good flavor. The dwarf habit of the vines makes it very desirable for forcing, as it can be planted closer to the glass, and more closely on the bench, than the tall growing kinds. Pkt 5c, oz 25c, $\frac{1}{4}$ lb 75c, lb \$2.50.

Mikado, or **Turner's Hybrid**—The largest purple-fruited tomat, weighing as high as 28 ounces, while the average weight is probably not less than 12 ounces. Vines large, coarse growing, with leaves entire, like those of the potato plant; very productive, and is early for so large a tomato; fruit extremely large, round, solid, with few seeds. Pkt 5c, oz 25c, $\frac{1}{4}$ lb 75c, lb \$2.50.

MISCELLANEOUS SORTS

Golden Queen—Pkt 5c, oz 25c, lb \$2. **Peach**—Pkt 5c, oz 25c, lb \$2. **Red Pear Shaped**—Pkt 5c, oz 25c, lb \$2. **Yellow Plum**—Pkt 5c, oz 25c, lb \$2. **Yellow Cherry**—Pkt 5c, oz 25c, lb \$2. **Husk or Ground**—Pkt 10c, oz 35c, lb \$3. **Cherry**—Pkt 10c, oz 35c, lb \$2.



TURNIPS AND RUTA BAGAS

TURNIPS AND RUTA BAGAS

For feeding stock in fall and winter there is nothing superior to turnips and ruta bagas, and they will yield a larger amount of food than anything else on the same space of ground. We cannot too earnestly recommend farmers to increase their sowings largely, for we are sure no crop will prove more remunerative.

Extra Early Purple Top Milan—Tops very small, distinctly strap leaved, and growing very erect and compact. The roots are small and flat turnip shaped; skin purple on top of the root, clear white below; flesh white. The most desirable sort for forcing, or very early planting outdoors. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 25c, lb \$1.00.

White Egg—A quick growing, egg shaped, perfectly smooth, pure white variety, growing half out of the ground, with small top and rough leaves. The flesh is very sweet, firm and mild, never having the rank, strong taste of some white varieties. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 50c.

Early White Flat Dutch, Strap Leaved—A most excellent early garden variety, much used in the Southern states. Roots medium size, flat; color white, very early, sweet and tender. It is desirable for table use, and is spongy and inferior when overgrown. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 50c.

Early Purple Top Strap Leaved—This is an early variety and a great variety for table use; form exceedingly flat, like a broad disk in shape, and of medium size; color purple or dark red above ground, white below; flesh white, fine grained and tender; leaves few, entire, upright in growth. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 50c.

Purple Top White Globe—A variety of the purple top flat turnip, from which it originated. It is globular in form, and nearly as large as the Pomeranian White Globe; of beautiful appearance, of most excellent quality, and equally desirable for table or stock. It keeps well and is a fine market sort. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 50c.

Cow Horn, or Long White—This variety is carrot-like in form, growing nearly half out of the ground, and generally slightly crooked. It is pure white, except a little shade of green at the top. It is delicate and well flavored, of very rapid growth, and has obtained considerable favor as a market sort for fall and early winter use. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 50c.

Large White Norfolk—A standard sort for field culture, which often attains a very large size; extensively grown all over the world for stock feeding. Shape spherical, or slightly flattened; color white. The seed should be sown a little earlier than table sorts. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 50c.

Pomeranian White Globe—Is one of the most productive kinds; in good rich soil roots will frequently grow to twelve pounds in weight. It is of perfect globe shape; skin white and smooth; leaves dark green and of strong growth. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 50c.

Sweet German—This variety is very popular in many sections. It partakes largely of the nature of the ruta baga, and should be sown a month earlier than the flat turnips. The flesh is white, hard, firm and sweet; keeps nearly as well as the ruta baga. Highly recommended for winter and spring use. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 50c.

YELLOW FLESHED SORTS

Large Amber Globe—One of the best varieties either for table use or for a field crop for stock. Flesh yellow, fine grained and sweet; color of skin yellow, with green top. Hardy, keeps well, a good cropper, and grows to a very large size. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 50c.

Orange Jelly, or Robertson's Golden Ball—Undoubtedly among the most delicate and sweetest yellow fleshed turnips yet produced. Not of large size, but firm, hard and of most excellent flavor. Keeps well and is superior as a table variety. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 50c.

Purple Top Yellow Aberdeen—Roots medium size, round; flesh pale yellow, tender and sugary; hardy and productive, and keeps well. It is an old esteemed variety, considered as approaching very nearly to the ruta baga in hardness and firmness of texture. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 50c.

SWEDES, OR RUTA BAGAS

Improved Purple Top Yellow Ruta Baga—A hardy and productive variety. Flesh yellow, of solid texture, sweet and well flavored; shape slightly oblong, terminating abruptly; color deep purple above and bright yellow under the ground; leaves small, light green. Has but little neck. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 50c.

Monarch, or Tankard Ruta Baga—This is a yellow fleshed sort, having very large, tankard shaped roots, with relatively small necks and tops. Color purplish-crimson above ground, yellow below; flesh very solid, fine grained and of the best flavor. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 50c.

Yellow Swede, or Ruta Baga—Shape oblong; dull reddish color above ground, but yellow underneath; is harder than the common turnip and will keep solid till spring. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 50c.

Sweet Russian, or White Ruta Baga—Very large size, good for table and for stock; flesh white, solid and sweet; heavy cropper and good keeper. Oz 10c, $\frac{1}{4}$ lb 20c, lb 50c.

Prize Winner—A uniform shaped, large sized, purple top kind; a heavy cropper, good keeper, and well it deserves that name. Oz 10c, $\frac{1}{4}$ lb 20c, lb 50c.

FLOWER SEEDS

Our list of Flower Seeds on the next page includes nearly every variety of merit sold by Eastern houses.

Notice our **SPECIAL OFFER** on Pansy and Sweet Pea Seeds.



OUR PANSY COLLECTION

SPECIAL OFFER No. 1

14 pkts. postpaid for 50c.

6 pkts. postpaid (your choice) for 25c.

These packets are all full measure and the seed of the highest quality.

The varieties are the most choice selected from a long list of named varieties.

Fire King—The best Red Pansy known.

Ivory Queen—Pure White.

Emperor William—Exceedingly large Blue Flower with Violet Eye.

Golden Beauty—The finest Yellow.

Mahogany—Very Rich Mahogany Color.

King of the Blacks—Coal Black, very large.

Lord Beaconsfield—Purple Violet.

Harlequin—Beautifully Blotched and Striped.

Light Blue—Beautiful Sky Blue.

Gold Margin—Large Red Flower with Yellow Border

Prince Bismarck—Golden Bronze.

Odien—Beautifully Blotched Brown and Gold.

Snowflake—Pure White.

Imperial German Mixed—Containing all the finest known varieties.

CHOICE FLOWER SEEDS IN BULK

	Pkt.	Oz.		Pkt.	Oz.		Pkt.	Oz.
Ageratum, Mixed	5	25	Pansy, Vaughan's International	15	00			
Adonia	5	30	Phlox, Dr. Grandiflora	15	00			
Arceuthobium, Everlasting	5	30	Phlox, Dr. Mixed	15	00			
Ammobium, Alatum Everlasting	5	30	Petunia, Hybrid Extra, Choice Mixed	5	12			
Ameranthus, Tricolor	5	30	Poppo, Double Carnation, Flowered	5	10			
Alyssum, Sweet	5	30	Portulacca, Single	5	10			
Alumina	5	30	Portulacca, Best Double	5	40			
Astor, Trufant's Pink	10	175	Sweet Sultan, Purple	5	30			
Astor, White and Light Blue	10	175	Salpiglosses, Grandiflora	10	12			
Astor, Victoria Mixed	10	175	Salpiglosses, Choice Mixed	5	10			
Astor, Black Comet	10	175	Salpiglosses, Large Flowering, Mixed	5	10			
Astor, Upright White Branching	10	175	Salvia, Splendens, Drooping Spikes	10	30			
Astor, Single, Mixed	10	100	Schizanthus, Mixed	5	25			
Aster, Chrysanthemum Flowered, Mixed	10	100	Shirley, Choice Mixed	5	25			
Aster, Branching	10	50	Sunflower, Miniature	5	25			
Aster, Branching, Pink	10	100	Sunflower, Double California	5	10			
Aster, Branching, Lavender	10	125	Stocks, Large Flowering, Choice Mixed	10	30			
Balsam, Double, Pink	5	80	Sweet William, Choice Mixed	5	10			
Balsam, Double, White	5	80	Verbena, Lemon	10	25			
Balsam, Double, Scarlet	5	80	Verbena, Hybrid, Fine Mixed	10	30			
Balsam, Double, Light Lemon	5	80	Verbena, Hybrid Mammoth	5	50			
Balsam, Candela Flowered, Mixed	5	80	Violet, Sweet	10	20			
Balloon Vine	5	15	Wild Cucumber	5	10			
Batchelor's Button	5	30	Zinnia, Double Grandiflora	10	50			
Briar, Maxima, Everlasting	5	30						
Bromus Bralgaferum, Everlasting	5	30						
Catchfly	5	15						
Canterbury Bell, Sweet Mixed	5	35						
Carkia	5	30						
Chrysanthemum, Double Mixed	5	25						
Chrysanthemum, Double, White	5	25						
Chrysanthemum, Double, Yellow	5	25						
Calendula, P. Margold, Prince of Orange	5	25						
Clematis	5	60						
Coccomb, Golden	10	300	Eckford, Mixed	10	05			
Coccomb, Crimson	10	300	Blanche Burpee	10	10			
Coccomb, Mixed	10	300	Blanche Burpee	10	20			
Calliopsis, Mixed	5	10	Countess of Radnor	10	25			
Candytuft, Empress	5	25	Emily Eckford	10	20			
Candytuft, Mixed	5	25	Firfly	10	20			
Canary Bird Flower	5	25	America	10	20			
Canna, Crozy	5	15	Gray Friar	10	20			
Carnation, Choice Mixed, Extra Fine	5	200	Indiogo King	10	20			
Carnation, Margaret	5	10	Lotta Eckford	10	20			
Castor Bean, Zanzibar	5	10	Meteor	10	20			
Cantaura, Cyranus Mixed	5	15	Mrs. Beckford	10	20			
Cantaura, Margaret	5	15	Mrs. Jos. Chamberlain	10	20			
Cobaea	5	15	Ranoma	10	20			
Coleus, Fine Mixed	10	800	Senator	10	20			
Cosmos, Early Flowering Dawn	5	30	Boreatton	10	25			
Cosmos, Fine Mixed	5	15	Peach Blossom	10	20			
Dahlia, Double, Mixed	10	100	Monarch	10	20			
Dianthus, Double Mixed Chinese	5	30	Galei	10	20			
Digitalis, Mixed Fox Glove	5	25	Saddle Burpee (New)	20	60			
Daisy, Bellie, Double, White	10	100	Navy Blue (New)	20	60			
Daisy, Swan River	5	30	Black Knight	15	40			
Eschscholtzia, Mixed	5	10	Modesti	15	35			
Forget-Me-Not, Blue Mixed	5	10	Queen Victoria	15	35			
Four o'Clock	5	60	Salopian	10	25			
Godetia, Double Mixed	5	15	Lottie Hutchins	10	25			
Godetia, Lady Albemarle	5	15	Lovely	10	25			
Godetia, Lady Martin Rose	5	15	Fancy Mixed	10	25			
Godetia, The Bride	5	125	Shahzada	10	25			
Godetia, Bijou	5	60						
Godetia, Queen of Fairies	10	100						
Godetia, Duchess of Albany	5	30						
Gilia, Tricolor, Mixed	5	15						
Hellotrope, Giant Mixed	10	300						
Hellotrope, Dark Mixed	10	250						
Hollyhock, Double Chatterer, Mixed	5	250						
Hollyhock, Allegheny	5	200						
Hollyhock, Salmon	10	300						
Hollyhock, Canary	10	300						
Hollyhock, Pease	10	300						
Hollyhock, Crimson	10	300						
Hollyhock, Pink	10	300						
Hollyhock, White	10	300						
Hibiscus, Africanus	5	15						
Hyacinth, Mixed	5	10						
Helichrysum, Everlasting	5	60						
Honey Suckle	5	40						
Ipomoea, White Seeded	1	100						
Lobelia, Mixed	5	60						
Larkspur, Double Dwarf Mixed	5	60						
Larkspur, Tall Mixed	5	20						
Lantana, Choice Mixed	5	25						
Linum or Scarlet Flax	5	15						
Lupinus, Annual Mixed	5	15						
Love-In-a-Mist, Double	5	15						
Job's Tears, Everlasting	5	10						
Morning Glory, Improved	5	15						
Morning Glory, Mixed	5	15						
Morning Glory, Japanese	5	15						
Mignonette, Sweet	5	10						
Mignonette, Mixed	5	10						
Marigold, African, Mixed	5	30						
Marigold, Eldorado	5	20						
Marigold, French Dwarf, Double Mixed	5	15						
Nasturtium, Madam Gunter's Hybrid	5	10						
Nasturtium, Tall	5	10						
Nasturtium, Dwarf	5	10						
Pansy, All Colors, Mixed	5	50						
Pansy, Chicago Park, Mixed Bedding	10	100						
Pansy, Trimardeau, Mixed Bedding	10	150						

SWEET PEAS

SPECIAL OFFER No. 2

For 25c we will send you by mail, post paid, a beautiful collection of Sweet Peas consisting of one package each of the following ten varieties:

Blanche Burpee—Pure White.

Apple Blossom—Bright Pink.

Cardinal—Brilliant Scarlet.

Shahzada—Maroon and Purple.

Capt. of the Blues—Pale Blue.

Orange Prince—Pinkish Yellow.

Venus—Salmon Buff.

Primrose—Pale Yellow.

Princess May—Lavender.

Vesuvius—Violet and Crimson.

SEEDS OF SWEET, POT AND MEDICINAL HERBS

Anise—Has useful medicinal properties. Pkt 5c, oz 20c.

Balm—Used for balm tea or balm wine. Pkt 5c, oz 20c.

Basil, Sweet—Used for highly seasoned dishes. Pkt 5c, oz 20c.

Bene—Used in confectionery. Pkt 5c, oz 20c.

Borage—Excellent for bees. Pkt 5c, oz 20c.

Caraway—Used for flavoring. Pkt 5c, oz 20c.

Castor Oil Plant—Pkt 5c, oz 15c.

Catnip—Used for seasoning. Pkt 10c, oz 50c.

Coriander—Useful culinary plant. Pkt 5c, oz 20c.

Cumin—Used for flavoring. Pkt 5c, oz 20c.

Dill—Used to flavor pickles, etc. Pkt 5c, oz 10c, ¼ lb 25c, lb 75c.

Elecampane—Pkt 5c, oz 20c.

Fennel, Sweet—Pkt 5c, oz 10c, ¼ lb 25c.

Fennel, Florence—Pkt 5c, oz 25c, ¼ lb 60c.

Henbane—Pkt 5c, oz 20c.

Hop Seed—Pkt 25c, oz \$1.50.

Horehound—For medicinal purposes. Pkt 5c, oz 30c.

Hyssop—For medicinal purposes. Pkt 5c, oz 20c.

Lavender—A popular aromatic herb, emitting a delightful perfume. Pkt 5c, oz 20c, ¼ lb 50c.

Marjoram, Sweet—Popular for seasoning. Pkt 5c, oz 20c, ¼ lb 50c.

Marjoram, Pot—Used for seasoning. Pkt 5c, oz 20c.

Opium Poppy—Pkt 5c, oz 20c, ¼ lb 40c, lb \$1.25.

Rosemary—An aromatic herb. Pkt 5c, oz 50c.

Saffron—Pkt 5c, oz 20c.

Sage—The leaves and tender tops are used in stuffing and in sauces. Pkt 5c, oz 20c, ¼ lb 55c, lb \$1.75.

Savory, Summer—Used for seasoning. Pkt 5c, oz 15c, ¼ lb 40c.

Thyme, Broad-Leaved—For seasoning; also useful as a bee food. Pkt 5c, oz 30c, ¼ lb 80c.

Tansy—Pkt 5c, oz 20c.

Winter Savory—Pkt 5c, oz 20c.

Wormwood—Pkt 5c, oz 35c.

MISCELLANEOUS SEEDS

None of the following seeds are sent postpaid. If wanted by mail, add 8 cents per pound to price quoted.

Australian Salt Bush—One of the most valuable forage plants for alkali soils. Pkt 15c, ¼ lb 40c, ½ lb 70c, 1 lb \$1.25.

Flax—Grown for its seed, from which is extracted linseed oil, and also for its valuable fiber. Yields very well in some localities in the Northwest. Price per lb 5c.

Wild Rice—Grows only in the water and in sloughs and boggy places. Valuable as an attraction for water fowl. Per lb 40c.

Spring Vetches, or Tares—This is one of the most valuable green feeds grown for horses and cattle. Usually sown with other grain. It thrives on any ordinary soil and is also a splendid crop to plow under. Per lb 10c, 100 lbs \$5.00.

Sand or Winter Vetch—This variety is very hardy and will remain green all winter if sown in the fall, and like all of the pea family is a valuable fertilizer. Per lb 5c, 100 lbs \$5.00.

TOBACCO

Can be grown in this climate only on light, warm soil, heavily fertilized.

Connecticut Seed Leaf.

Imported Havana, Pkt 10c.

Sumatra, Pkt 10c.

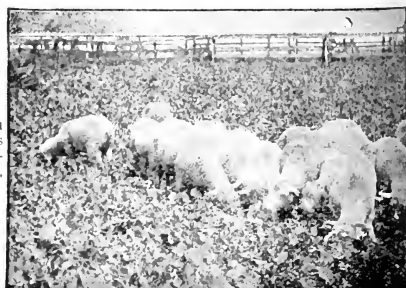
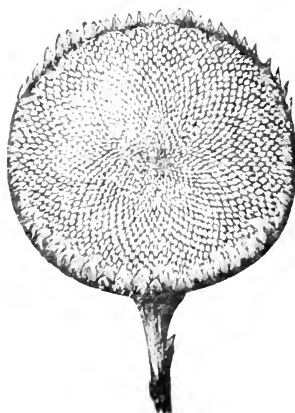
Oronoko.

RAPE

Dwarf Essex—One acre will pasture thirty-six head of sheep two months. The success obtained in raising sheep for mutton, for which the English are so famous, is undoubtedly due to the general use of Rape as a pasture. It has remarkable fattening properties and lambs will make a gain of from eight to ten pounds a month upon it. It can be sown with oats or on stubble, after a corn crop, or any time after June 1st. It is one of the best catch crops and will furnish abundant pasturage at the time of year when most needed. On clean, rich soil eight to ten pounds is sufficient to sow an acre broadcast; but if the soil is poor and not clean it is better to sow in drills, so as to allow cultivation, four or five pounds per acre. Per lb 15c, 100 lbs \$10.00.

SUNFLOWER

Mammoth Russian—Yields an enormous amount of seed and is very hardy. A most excellent poultry feed; easy to raise. 1 lb 15c, 100 lbs \$6.00.



GRASS AND CLOVER SEEDS

In the following list we have briefly described the various best grasses for general use. Our limited space does not permit extended descriptions and large illustrations, but the seeds we offer are of best grade and extra clean. The prices are subject to variations according to the market. Special prices will be quoted at any time by mail.

Extra Fine Mixed Lawn Grass—Incomparably the best mixture known for lawns and parks in this climate, and when cut frequently and watered well immediately after will furnish a handsome, velvety lawn for years, requiring no reseeding. The use of our Lawn Top Dressing in the spring or fall adds greatly to a good lawn. Per lb 20c.

Awnless Brome Grass (Bromus Inermis)—Will stand long drouths and produce heavy crops in dry sections where other grasses would perish. It has also proved one of the hardiest grasses; will succeed in a wider range of temperature than any other grass. Per lb 25c, 100 lbs \$13.00.

Orchard Grass, or Cock's Foot—One of the most valuable grasses on account of its quick growth and valuable aftermath. It is ready for grazing two weeks sooner than most grasses, and when fed off is again ready for grazing in a week, and will continue green when other grasses are withered by dry weather. It is palatable and nutritious, and stock eat it greedily when green. It has a tendency to grow in tufts, and so does better if sown with clovers, and as it ripens at the same time the mixed hay is of the best quality. For grazing it has no equal, and should be used more than it is. When sown alone, twenty-five pounds per acre; if sown with clover, half that amount. It is perennial and will last for years. Per lb 14c, 100 lbs \$12.25.

Italian Rye Grass—Is more of an annual, and is good in mixtures for hay crop. It is of quick growth and valuable for sheep pasturage. Per lb 10c, 100 lbs \$8.00.

Herd, Red-Top Grass, or Bent Grass—Is most largely used for wet lands, but does well in almost any soil, moist or dry. It makes good hay or pasture, and is much used in mixture with timothy and clover. Sow thirty pounds per acre. Per lb 10c, per 100 lbs \$8.00.

Kentucky Blue Grass—Is the finest and best of all grasses when used separately or in mixtures for general lawn purposes, and is invaluable for a pasture grass, as it stands so much tramping without being killed out. Use thirty to forty pounds per acre. Per lb 20c, 100 lbs \$15.00.

Sweet-Scented Vernal—One of the earliest grasses in spring, and latest in autumn, and more fragrant than any other grass. Valuable to mix in pastures with other grasses on account of its earliness, and it exhales a delightful fragrance when in bloom. About thirty pounds to the acre. Per lb 30c.

Johnson Grass—This is one of the most valuable forage plants; very popular in the Southern states, and will come into universal use in all parts of the United States when known. It is perennial, a rapid grower, very nutritious, being eagerly devoured by all kinds of stock. Comes early in spring, grows until the frost cuts it down in the fall, stands the drouth better than any grass, and having long, cane-like roots which penetrate the soil for moisture. Superior both as a grazing and hay grass. Thirty pounds per acre. Per lb 15c.

Tall Meadow Oat Grass—This grass is early and very luxuriant. It makes fine pasturage and good hay. Can be cut often. It is also valuable to plow under for soiling. Sow thirty to forty pounds per acre. Per lb 20c, per 100 lbs \$18.00.

Timothy—It is very largely grown for hay crop in Northern climates, and is fine when sown with Red Top and clover. Sow ten pounds per acre. Per lb 8c, per 100 lbs \$7.00.

Meadow Fescue, or True English Blue Grass (Festuca Pratensis)—One of the most valuable pasture grasses. Its long and tender leaves are much relished by stock of all kinds. In some Southern states it is called Randall grass, sometimes Evergreen grass. Sow in spring or fall at the rate of thirty to forty pounds per acre. Per lb 16c, 100 lbs \$12.00.

Hungarian Grass—Is a very valuable forage plant for light, dry soils. It withstands drouth and remains green when most vegetation is parched. Sow and cultivate as for Millet. Per lb 8c, per 100 lbs \$6.00.

Common Millet—Can be sown broadcast in the spring of the year, or hay, thirty to forty pounds to the acre. If for seeds, sow in drills, twenty pounds to the acre. It produces largely as an annual early crop. Per lb 8c, per 100 lbs \$5.00.

German or Golden Millet—Is not quite as early as the above, but yields more largely. Per lb 8c, per 100 lbs \$5.00.

English or Australian Rye Grass—Is a perennial much like the English Blue Grass, and is very valuable for either pasture or for hay, and well adapted to moist land. Sow for hay thirty pounds per acre. Per lb 10c, per 100 lbs \$7.50.

CLOVER SEEDS

Red Clover—Two varieties, large and medium. Both succeed well here, especially in our bottom lands and deep soils. Per lb 14c, per 100 lbs \$13.00.

Crimson Trefoil, or Scarlet Clover—Grows about one foot high. Dark roots, long leaves, and blossoms of deep red. It makes good hay, and will give two or three cuttings each season. Per lb 10c, 100 lbs \$9.00.

Alfalfa—Produces enormous crops, and is cut many times during the season for hay. It roots deeply, keeping fresh and green through a long dry season, and is the most valuable and profitable of all crops for abundance of feed. If in the fall, sow early enough to get a little root before a frost. It can be sown again in February and spring months. Per lb 12½c, 100 lbs \$11.00.

White Dutch Clover—Grows low, spreading, and very fragrant, and is most excellent for lawns and pasture. Per lb 25c, per 100 lbs \$18.00.

Espersette (French Sanfoed)—This plant is of a lignumvose character, having many stems two and three feet long. Smooth and tapering, with many long, oblate leaflets in pairs, and spikes of variegated crimson flowers. The root is perennial, of a hardy, woody nature. The plant flowers early, and can be repeatedly cut, thus furnishing a great abundance of most nutritious food through the long dry and heated seasons, and requiring no irrigation. Stock will eat it with impunity, without danger of bloat, as in alfalfa. The seed and seed pods are said to be more nutritious than oats. The plant does best in calcareous and gravelly soils, and elevated slopes and arid regions, where other vegetation fails. It will, however, not succeed in wet or low lands where there is no drainage. From thirty to forty pounds are required for an acre. Per lb 12c, 100 lbs \$10.00.

Alsike, or Swedish Clover—This variety is fast gaining great popularity. It is the most hardy of all the clovers; perennial. On rich, moist soils it yields an enormous quantity of hay or pasture, and may be cut several times in a season. But its greatest value is for sowing with other clovers and grasses, as it forms a thick bottom and greatly increases the yield of hay, and cattle prefer it to any other forage. The heads are globular, very sweet and fragrant, and much liked by bees, who obtain a large amount of honey from them. Sow in spring or fall. Per lb 13c, 100 lbs \$12.00.

GRAIN

Buckwheat, Common

—Buckwheat should be sown about the middle of June, broadcast, at the rate of from one to three pecks per acre. The average yield is from 25 to 30 bushels per acre. It should be threshed as soon as dry, on the ground or barn floor. If allowed to stand in mass it quickly gathers moisture. Per lb 5c, per 100 lbs \$3.50.

Japanese Buckwheat

—This variety excels them all. Will yield fully twice as much on the same ground as any other, and it ripens one week to ten days earlier; stands up better, and makes better flour than any other kind of Buckwheat. Per lb 8c, 100 lbs \$5.00.

Barley, Common—Barley succeeds best on lands more sandy and lighter than those adapted to wheat. It is sown in the spring, and can be grown further north than any other grain. Market price.

Rye, Fall or Winter—The time for sowing is from the middle of August to the last of October. One plowing is given, and the seed sown broadcast at the rate of one and a half bushels per acre, and dragged in. Harrowing and rolling in the spring are recommended. If cut before fully ripe the grain makes more and better flour. Market price.

Rye, Spring—Although this grain is often planted by farmers, especially for paper makers, who prefer it to any other its principal value is as a "catch" crop to sow where winter grain has failed. The straw is shorter and stiffer than that of the winter variety, and is always easily secured, while the grain, although smaller, is of equal value. Market price.

Oats—American Banner and other varieties. Market price.

Wheat—Blue Stem and Club Wheat at market price.



NEW CEREALS

CORN WHEAT
GERMAN ROGGEN

Fattening Hogs

The Problem Solved

This new cereal solves the problem of fattening hogs in a wheat country, as it outyields corn and will double an average yield of wheat, and makes a meal very much like corn and contains greater fattening properties than either corn or wheat.

It will put the Pacific Coast on an equal basis with the corn producing states as regards hog raising.

The Richest Grain Grown

Chemical Analysis

contains almost double the nutriment of wheat:

Moisture at 100° C.....	13.69
Ash.....	0.90
Either extract.....	3.34

The following analysis, furnished by Professor of Chemistry C. W. McCurdy, of the University of Idaho, will show that this wonderful cereal

Fiber.....	.91
Protein.....	15.50
Nitrogen free extract.....	71.14

Grows Anywhere

Yield

Corn Wheat will yield from 50 to 100 bushels to the acre. The straw is the most valuable of any grown and stock thrive upon it.

Culture

This grain does well upon any soil where wheat or oats will grow, and the soil should be prepared in the same manner as for those crops. The seed should be sown in the spring. About 75 to 100 pounds per acre.

Corn Wheat stools heavily and has great strength to resist drought.

Every farmer should give it a trial, as it makes a splendid grain pasturage and is far superior to any other grain for hay.

By mail, post paid, per lb.; 5 lbs

By freight, 50 lbs,; 100 lbs.



White

Hulless

Barley

THE BEST GRAIN ON EARTH FOR HAY

IF SOWN EARLY two crops may be cut from one planting. It will yield from 65 to 100 bushels per acre, and may be sown as late as the middle of June and produce a fair crop of grain. Equal to corn for fattening hogs, and makes a much sweeter meat. Grows quickly, on any kind of soil. . . . For grain, sow 90 lbs. per acre, and for hay 120 lbs.

Price, 1 lb., postpaid, 15c; 100 lbs., \$2.50

Black Hulless or Nepaul Barley

This grain is very similar to the above, but has a black seed, and is not quite as sweet a grain.

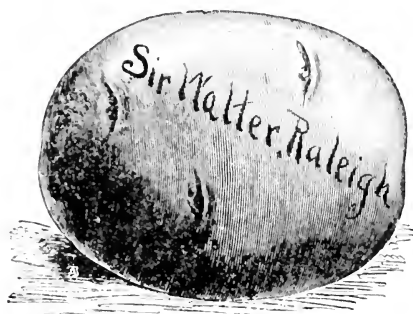
Price per lb., postpaid, 15c; per 100 lbs., \$2.50

Beardless Barley

This has the advantage over the common barley of having practically no beard. It yields just as heavy, and threshes out clean, and the straw makes excellent hay.

Price per lb., postpaid, 10c; per 100 lbs., \$2.00.

SEED POTATOES



While we list only a few of the best early varieties, we can supply any of the leading kinds grown on the Coast and most of the newer ones from the East.

All stock of the purest strain.

We also send Potato Eyes of any of our varieties postpaid to any address for 50c per 100.

The Pingree—A very productive early variety yielding a large crop of quick selling potatoes at least six days earlier than almost any other variety. Grows very compact in the hills and is therefore easily harvested. Very uniform in size and is of the very highest quality. Per lb 3c, per 100 lbs \$5.00.

Early Ohio—This is the most popular early potato in this country. We have more calls for it than for any other variety. Every potato grower knows what it is, and knows just about what it will do in his locality. It is the standard extra early the country over, and other varieties are measured by it. We have an extra choice strain of Early Ohio. The tubers are smooth and regular in shape, free from prongs, perfectly pure, and full of vigorous life. Per lb 3c, per 100 lbs \$2.50.

Bliss' Triumph—The leading early potato in the South. We are all familiar with it as sold at our groceries when the first "new potatoes" are shipped in. Extremely early, earlier than any others, but not of as good quality and more subject to blight than other varieties. Vines are small, with short stalks and broad leaves. Tubers nearly round, medium in size, bright red or reddish pink in color. Per lb 4c, 100 lbs \$3.50.

Bovee—Introduced by Henderson in 1897. Next to Potato Pingree, we consider this the best early variety of recent introduction. The tubers are numerous and of fair size, uniform in shape, skin a beautiful flesh color, well netted, and quality all that can be desired. The vine is dwarf and stocky, and the tubers grow remarkably compact. Per lb 4c, 100 lbs \$3.50.

Sir Walter Raleigh—Introduced by Henderson in 1897, and therefore the companion to the Bovee. It is the most desirable main crop variety now before the public. In most respects it closely resembles Rural New Yorker No. 2, but is more uniform and yields practically no small tubers, every one being marketable. It is from four to six days later than the Rural New Yorker. The color of the skin is the same, but the flesh is white and of better quality; in fact, it is the whitest fleshed and finest grained potato. It is unquestionably the best of its type and will soon supersede all others. Per lb 5c, per 100 lbs \$4.00.

Rural New Yorker No. 2—Well known now the country over, and very largely planted for a profitable main crop. Rurals are now quoted in all the leading markets of the country along with Burbanks and other standard sorts, and usually they are quoted higher than Burbanks. They are certainly more profitable to raise. Per lb 5c, per 100 lbs \$4.00.

Burpee's Extra Early—Quite well known and very popular in the middle states. Yields very good crops on this coast, and is among the earliest. Per lb 4c, per 100 lbs \$3.00.

Uncle Sam—Our stock of this magnificent potato is limited this season, therefore we have not listed it in its rightful place, as it really deserves first place in any list. Per lb 6c, per 100 lbs \$5.00.

FERTILIZERS

Commercial Fertilizers are becoming more generally used every year, and on most soils are really the cheapest manure that can be used.

Every intelligent farmer knows the value of the Potash Salts listed below.

Kainit—The most popular of the potash salts. Besides furnishing a percentage of potash is more bountifully supplied with magnesia, which makes it valuable as a destroyer of insect life, worms and maggots in the soil, and is a specific for blight and rust.

Muriate of Potash—Is a more concentrated fertilizer and is the cheapest for general use, as it contains about 50 per cent. of potash.

Sulphate of Potash—This also contains from 50 to 60 per cent. of potash, but as it is almost free from chlorine it is particularly adapted to root crops and berries.

Special circulars on the Uses of Potash in Agriculture, Results Obtained in the United States, The Origin and Use of Potash, and Farmers' Guides mailed upon application.

NITROGENOUS FERTILIZERS.

Nitrate of Soda—Contains from 15 to 20 per cent. of nitrogen and is the most valuable method of supplying the nitrogen necessary to the rapid growth of plants. Valuable to florists and greenhouse men for forcing plants.

Dried Blood—This is also a nitrogenous manure, containing from 10 to 15 per cent. of nitrogen. Does not act as quickly as Nitrate of Soda and requires to be more thoroughly worked into the soil.

PHOSPHORIC ACID.

Bone Meal or Bone Dust—Is the most convenient fertilizer for supplying phosphoric acid. Good fresh ground bone contains from 5 to 10 per cent. available phosphoric acid, but it is rather slow to yield, and the results are often better the second year than the first.

LIME.

This requisite is best obtained from the air-slacked lime and from Land Plaster, which is also a splendid application for soils made sour by excessive use of stable or green manure.

PRICE LIST OF FERTILIZERS

Sulphate of Potash, per lb 3c, per sack of 224 lbs.	\$7.00
Muriate of Potash, per lb 3c, per sack of 224 lbs.	6.25
Kainit, per lb 11c, per sack of 224 lbs.	2.25
Nitrate of Soda, per lb.	.034
Bone Meal, per ton.	30.00
Blood, per ton.	50.00
Lime, per bbl.	Market price
Plaster, per ton.	Market price

SEPARATE INGREDIENTS TO BE USED, POUNDS PER ACRE

Formulas approved by Prof. Elton Fulmer.

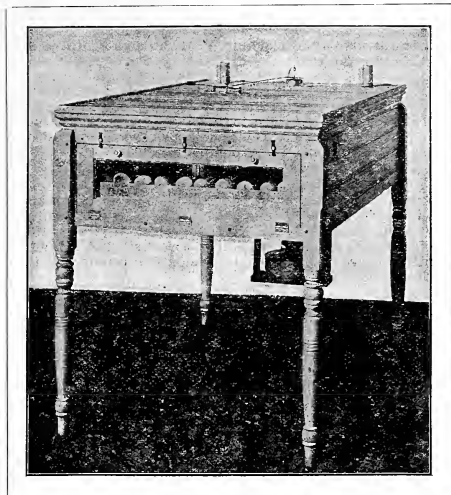
Crop to be Fertilized	Sulp. Pot.	Mur. Pot.	D. M. Salts	Kanit	Bone Meal	Nit. Soda
Cabbage	325	325	650	1250	550	375
Carrots	150	150	300	550	300	135
Turnips	125	125	250	550	200	280
Beets	125	125	250	550	200	375
Peas and Beans	125	125	250	550	240	45
Onions	300	360	600	1150	450	400
Sweet Corn	80	80	160	350	350	80
Potatoes	250	250	500	950	325	275
Grass	125	125	250	500	250	135
Hops	360	360	720	1400	275	200
Strawberries	250	250	500	1000	450	225
Lettuce	275	275	550	1000	400	375
Celery	250	250	500	900	400	375
Cucumbers	250	250	500	900	400	275

INCUBATORS

...AND...

POULTRY SUPPLIES

We are
Pacific Coast Agents
for the
Celebrated
Prairie State
Incubators and
Brooders...



Also
Headquarters
for
POULTRY SUPPLIES
of
All Descriptions

General Description of Prairie State Incubators

APPLICATION OF HEAT

The first essential to successful incubation is proper application and regulation of heat. The nearest practical approach to Nature's method, which is by contact, is secured by radiation of heat from above, no bottom heat being applied in either case. The distribution of heat is secured in the following manner: The lamp is situated at the end of the machine, the chimney extending into flue which passes upward through the machine and radiator, at which point we have an opening in the flue, through which the hot air from the lamp is diverted into a galvanized iron radiator covering the entire top of the egg chamber. After circulating through the radiator the air passes upward and out through pipes at the end of the machine, thus equalizing the heat everywhere in the egg chamber.

REGULATION OF HEAT

After an even temperature is secured in the egg chamber, a regular or constant heat must be supplied. This is done in a perfect manner by the Prairie State Regulator. The regulator consists of a thermostate, connecting rod and valve lever, the simplest combination in use on any known Incubator. The motive power of the regulator is the thermostat, unassisted by clockwork electricity or any other appliance. The thermostat is situated in the egg chamber, part below and part above the eggs. It is so sensitive that it responds to the heat's action with as great precision as any thermometer. It may be easily adjusted to any degree of temperature desired, and there it will faithfully operate, opening and closing the valve with unerring exactness. This thermostat is composed entirely of metal, no composition, ebonite or india rubber being used in its construction, and it will not become weak or ineffective by use; it is not affected by moisture or dampness, nor can it be destroyed by being accidentally overheated. The valve, when closed, covers the top of the lamp flue and obstructs the current of hot air, forcing it into the radiator, as above described. When the temperature in the egg chamber reaches the desired degree, the thermostat lifts the valve from the top of the lamp flue and allows the heat to escape from the heater, while the air of the egg chamber, or ventilation and moisture, is unaffected by the opening of the valve. The action of the valve does not affect the lamp flame, and does not cause it to burn higher or put the lamp out, as in the case with all devices that utilize the lamp trip. The compound thermostat, or self-adjusting regulator is new in artificial incubation. Heretofore the practice has been to place the thermostat in the top of the egg chamber, and every change in the weather or change in the animal heat in the eggs would cause the operator to go and readjust the regulator. With this regulator, when the weather turns either warmer or colder, the change affects the lower bar, and it readjusts itself to the change, changing the distance on the connecting rod and maintaining a perfectly uniform temperature upon the eggs, no matter if the outside change is 50 or 60 degrees. We have run this machine in a room when temperature ran from freezing in the early morning to a temperature of 80 in the afternoon, with less than one-half degree variation in the egg chamber. This is a feature that will not be overlooked by practical poultry men. No matter how sudden the change in the weather may be, the temperature of the eggs will not be affected.

CONSTRUCTION

None but first-class work will be sent out. The machine is built of the best well-seasoned material, neatly ornamented and finished, so as to constitute a handsome piece of furniture. It is double-cased, and insulated from the influence of sudden changes of outside temperature by proper packing. Its doors are of double glass, through which may be seen the thermometer and eggs, without the exposure of opening. All sheet metal work, pipes, pan and tank, is constructed of best galvanized iron. The regulator is made of brass. The machine is not "double decked"; that is, it does not have one egg tray above the other. Consequently its rated capacity is its actual hatching capacity. All kinds of eggs can be hatched equally well—hen, duck, turkey, etc. Natural or artificial gas may be used in place of oil, without trouble in making the change.

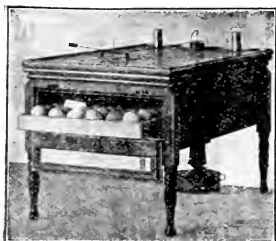
MOISTURE

Every one interested in Incubators and Brooders hears a great deal about moisture, also "no moisture" Incubators advertised. Now, the "no moisture" question is nothing new whatever. In our directions we have for the past ten years explained to customers that no moisture whatever was needed in certain seasons of the year; out we claim, and it has been fairly demonstrated, that a little moisture during the warm summer months is a great aid in securing better hatches. We furnish a moisture pan with each of the larger machines that we construct, and we state in directions for the customer not to use the same unless absolutely necessary. Prairie States are frequently run without any moisture from start to finish, and over 90 per cent. hatches secured, as testimonials in this catalogue will show. You have perfect control of the warm, fresh air through the machine at all times, hence you are able to dry down your eggs so as to secure the proper air cell, according to the season of the year. We are surprised at some of our competitors claiming so much in reference to the moisture question, and we will guarantee to take the Prairie State and run it alongside of any machine in this or any other country, without any moisture from start to finish, and secure better hatches than they do, with less trouble to operate the machine. The only reason we put a moisture pan in the machine is this: You will be able to secure better hatches in the Prairie State, or any other machine, during the hot summer months, by adding a little moisture toward the latter part of the hatch. Moisture is not needed at all in the machine until the eighteenth or nineteenth day, and probably not then. The operator will be able to determine this after he reads our directions. Further, moisture is only a little water; it costs nothing, and if the operator of an incubator can bring out ten, twelve, or twenty more chickens to the hatch by putting in a tin full of warm water for moisture, we claim it will pay to do so; hence moisture pans go with the machines, but, as stated above, no moisture at all will be needed during the winter months or in damp weather. With some of these "no moisture" Incubators, we know positively that some of their operators do use moisture in order to secure better hatches, owing to the season, notwithstanding their manufacturers claim no moisture at all. As stated above, we furnish the moisture pans; use them if necessary, and if you find they are not needed they will not need to be brought into use.

VENTILATION

The second essential to successful incubation is a supply of pure air, which, in the Prairie State, enters from below within a tube which surrounds the lamp flue, where it is gently heated and passed upward into the top of the egg chamber, and is released over the moisture pans. While in this warm condition, it can be saturated with moisture if it is so desired. The air then passes downward among the eggs, and escapes through a row of small ventilators in the bottom and end of machine into a suction flue which carries the air out near the top of the machine. This suction flue is provided with a sliding cover, so that the outlet of air can be increased or diminished. By this means of improved ventilation we get a complete circulation around and through the eggs, a more even distribution of heat than can be secured by any other method.

THE PRAIRIE STATE BABY INCUBATORS



These machines are built in two sizes, respectively 50-egg and 100-egg sizes. The No. 1, or 50-egg Incubator, is provided with a blank tray and no turning appliance, as the eggs are so few in number that they can be turned by hand. The No. 2 Baby, capacity 100 eggs, is provided with the latest improved automatic turner. There has long been a demand for something cheap and not a very large capacity, that would prove very practical and successful in incubating eggs, and we believe that the Prairie State Baby will fulfill all these requirements. This machine has the same system of ventilation that is used so successfully upon our standard machine, and has identically the same self-adjusting, automatic regulator and the same heater and lamps, and everything is carefully constructed and built in the best manner.

	Dimensions	Capacity	Net Weight	Crated Weight	Price
No. 1, Baby	14½x24	50 eggs	40 lbs	45 lbs	\$ 7.00
No. 2, Baby	19½x31	100 eggs	65 lbs	70 lbs	11.00

STYLE "A"

The Style A machine is our standard Incubator, on which neither pains nor expense have been spared to make it the best of its class. It is complete in every respect, having a large, deep egg chamber, and provided with nursery underneath the tray. An opening is left in tray near the glass at the door, closed by a small trap door, through which the chickens drop after they hatch, so that they do not interfere in any way with the ones getting out of the shells. It is unnecessary to open the door until the hatch is over. The doors open down to the bottom of the machine, the glass extending below the nursery, which enables the operator to see the chicks below and above the tray at any time. This nursery is a grand improvement. The chicks, as soon as they dry off and begin to run about, fall through the opening into the nursery below and become better hardened to the temperature of the Brooder before being transferred.

The moisture pans in the Style A Incubator are suspended by a flange from the top of the egg chamber, and by this form of construction we get a clear space without any bars or supports being in the way. For a further description of the Style A machine see under head of "General Description of Prairie State Incubators."

	Dimensions	Capacity	Net Weight	Crated Weight	Price
No. 1, Style A	27 x37	150 eggs	140 lbs	170 lbs	\$23.00
No. 2, Style A	27½x47	210 eggs	170 lbs	215 lbs	27.00
No. 3, Style A	30 x46	300 eggs	200 lbs	260 lbs	35.00

PRAIRIE STATE STYLE "B" INCUBATOR

This machine is just the same as the style "A," except in finish, but has no nursery. The same care is used in its construction.

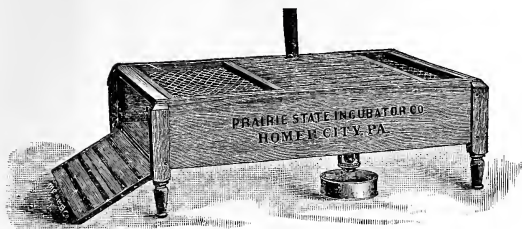
	Dimensions	Capacity	Net Weight	Crated Weight	Price
No. 1, Style B	27 x37	150 eggs	120 lbs	150 lbs	\$18.00
No. 2, Style B	27½x47	210 eggs	150 lbs	195 lbs	25.00
No. 3, Style B	20 x46	300 eggs	180 lbs	240 lbs	29.00

THE SPECIAL DUCK MACHINE

The Special Duck Machine has been built to fulfill the requirements of those who raise ducks exclusively and upon a large scale. The same principles have been used in designing it that have been employed upon our standard Prairie State machines for the hatching of hen eggs, slight modifications being made, especially in the ventilation and air current, so as to allow a large amount to circulate through the machine. The egg tray is built in proportion to a duck egg, so that there is no waste room in the machine, and the egg chamber is made much deeper than the regular hen egg machine, so that the hatching ducks have plenty of room above and below the tray.

	Dimensions	Capacity	Net Weight	Crated Weight	Price
Special Duck	30x16½	200 eggs	200 lbs	260 lbs	\$36.00

PRAIRIE STATE BROODERS



Style "D"

circulates the hot air from the lamp. One-half inch away from the radiator is a wire gauze to prevent the chicks from touching the tank and allowing the air for ventilation to pass over the chicks.

The Brooders are provided with forced ventilation, ventilating all parts of the hover.

No.	Size	Capacity	Weight Crated	Price
1	24x35	80 chicks	60 lbs	\$ 8.00
2	26x35	125 chicks	85 lbs	11.00

STYLE "D"

HOT AIR INDOOR BROODER.

We have had this Style D Brooder upon the market for several years, and they are giving universal satisfaction. They are low in price, simple in operation, and take but very little oil to operate them successfully.

The No. 1 is 2 feet wide and 3 feet long, and the No. 2 is 3 feet square. They are constructed with an incline so that the chicks can get in and out of the Brooder, and when the incline is closed at night the chicks are free from rats or prowling enemies.

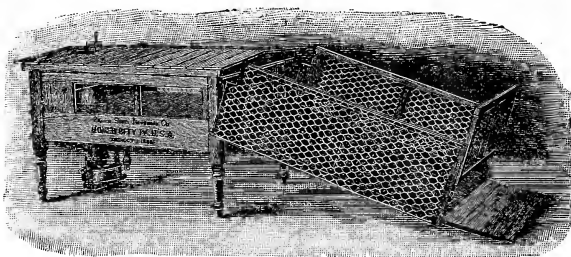
The hovers are a galvanized iron radiator through which

STYLE "A"

HOT AIR—SELF-REGULATING, WITH RUNS ATTACHED.

This Brooder is heated and regulated the same as the incubators, and has runways in connection.

No.	Size	Capacity	Weight Crated	Price
1	24x38	100 chicks	100 lbs	\$15.00
2	28x33	200 chicks	120 lbs	21.00



Style "A"

STYLE "C"

STYLE C—HOT AIR OUTDOOR BROODER.

This Brooder is rain, rat, wind and storm proof. The roof is removable, and the entire brooder can be lifted off the floor, the brood can be removed, and the corners are put together like the joint of an ordinary bedstead, so that the Brooder can be taken entirely to pieces and put together again in a very few minutes, making it easy to clean. Or, it can be stored in a small space after the season is over. It is upon runners and can be easily moved from one place to the other. The lamp box is closed by a glass door, so that the lamp and flame can be easily seen at any time. The lamp case is also provided with our new improved cold air duct, which keeps the oil cool at all times.

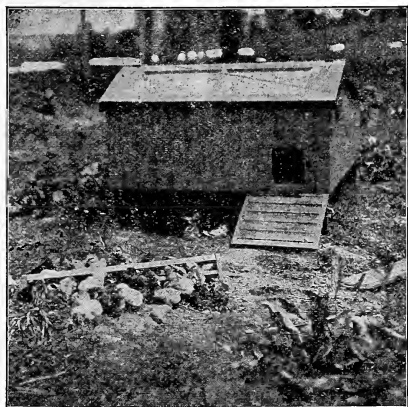
No.	Size	Capacity	Weight Crated	Price
1	36x36	100 chicks	125 lbs	\$14.00
2	48x48	150 chicks	185 lbs	\$19.00

STYLE "B"

STYLE B—SECTIONAL HOT WATER BROODER.

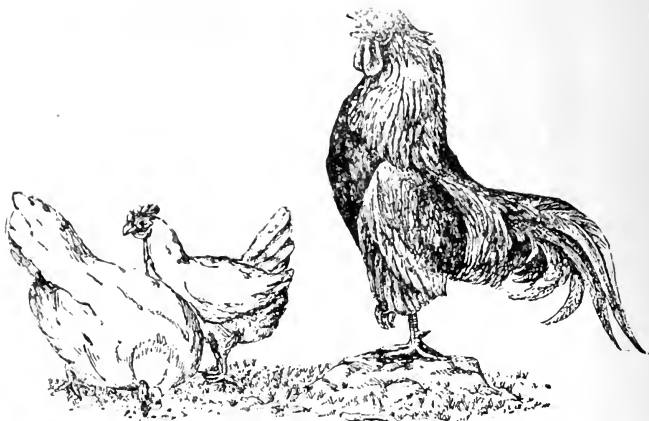
These Brooders are heated by the hot water system and are made in sections with removable floor. They give more room than the hot air brooders, so that there is no danger of chicks crowding.

No.	Size	Capacity	Weight	Price
2, two sections each	35x36	200 chicks	210 lbs	\$23.00
3, three sections each	36x36	300 chicks	310 lbs	29.00
4, four sections each	36x36	400 chicks	410 lbs	36.00

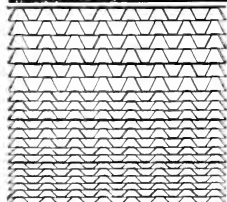


Style "C"

POULTRY SUPPLIES



M.M.S. Poultry FENCING



is made of the best number nineteen galvanized steel wire, strengthened by a cable sewage and a cable every foot in the height of the fence.

A Fence, Not a Netting.

Its multitude of horizontal wires gives it strength, makes it easy to erect and keeps it in good shape.

50% Saving to the User.

It requires but few posts and no top or bottom rail. Only genuine when every roll contains the famous M. M. S. trade mark. Descriptive matter free.

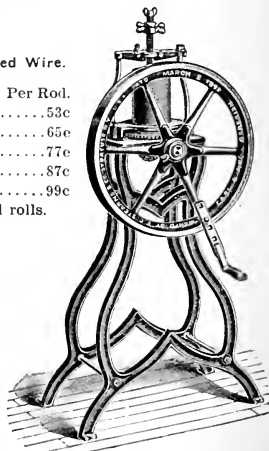
Patented July 21, 1896, and July 6, 1901

No. 19 Galvanized Wire.

Per Rod.

36 inches high.....	53c
48 inches high.....	65c
60 inches high.....	77c
72 inches high.....	87c
84 inches high.....	99c

Put up in 10-rod rolls.



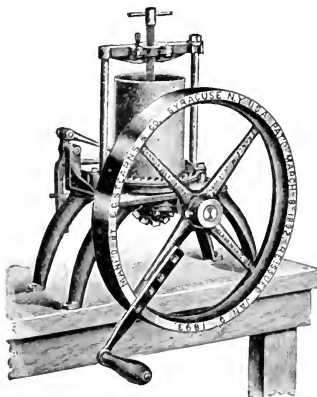
No. 6

Green Bone, Meat and Vegetable Cutters

The Webster & Hannum—THE ONLY mill that will cut bone fine enough for bantams and young chicks, without splinters.

THE ONLY mill that will not clog with meat or gristle.

THE ONLY mill that will cut clear meat without freezing.



Improved No. 2

OUR LATEST

The No. 6 Cutter—This machine feeds itself with more uniform pressure than can ever be done by hand feed. And this uniform pressure is perfectly under the control of the operator. By simply turning the thumb nut at the top of the follower the pressure of the follower can be uniformly as light, and the machine turn as easy as any one could wish; or, if desired, the thumb nut can be tightened in an instant and the pressure increased to suit the strength of any one. It is built strong and heavy and made to last, weighs 135 pounds and holds 2½ pounds of bone—enough for 60 or 70 hens for one day. One pound of bone has often been cut in one minute by hand on this machine.

Price, with fly wheel, for bench, \$18.00.

Price, with fly wheel, with legs, \$22.00.

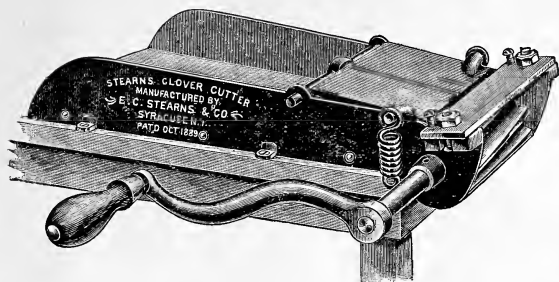
IMPROVED No. 2

The Improved No. 2 Cutter has several improvements, including an adjustable feed, by which the operator can instantly change, without use of tools, from light to coarse work as may be required in cutting bone or vegetables. We recommend this style for hand use where considerable work is to be done. Price \$15.00.

The No. 4 Cutter is a genuine record breaker for ease of operation, quality of work and speed, readily cutting out a hopper full by hand (2½ lbs) in two or three minutes, enough for a flock of 60 or 70 hens for one day, and fine enough for little chicks.

Price, with crank, \$8.50.

Price, with fly wheel, \$10.00.



THE STEARNS CLOVER CUTTER

This cutter is made in convenient size for use on bench or table. The entire frame is made of malleable iron, making a very light and strong machine. It is self-feeding and self-sharpening. Cuts clover very rapidly, and is run with little effort. Eight cuts to each revolution. Finished in black enamel.

Price, \$3.00.

NEST EGGS

Porcelain, per dozen	\$0 30
Medicated, per dozen	1 00

DRINKING FOUNTAINS

L. & B. Fountain—This fountain is made of heavy galvanized iron, will not rust or break, and with reasonable care will last a lifetime. Can be taken apart and easily cleaned. Fowls cannot get on top nor into it, nor turn it over. These fountains give the best satisfaction of any we have sold. Prices:

No. 1. 1½ quarts	35c
No. 2. 2½ quarts	45c
No. 3. 1½ gallons	60c

No. 1 sent by mail, postpaid, 40c.

Earthenware Fountains—Heavy glazed earthenware, all one piece. 1 gallon, 35c; 2 gallon, 50c.

Feed Troughs—These troughs can be used for soft feed or water. They are made of heavy galvanized iron, and will not rust or break; can be cleaned in a few seconds. The edges are all rounded to prevent the fowls from injuring their combs or wattles, are easily accessible, yet so constructed that food placed in them cannot be scattered on the ground; fowls can neither get on nor into them. Size 18x6 inches. Price 60c; 2 for \$1.00.

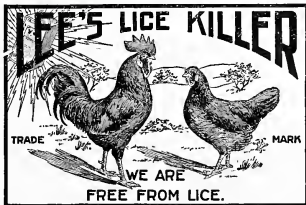
Feed Trough for Chicks—This trough is made of heavy galvanized iron; will not break or rust, easily cleaned; edges all rounded. Size, 12 inches long, 3 inches wide, 2½ inches high; weight ½ lb. Price, 30c; 2 for 50c. Sample will be mailed, postpaid, for 35c.

Caponizing Tools—This set consists of one fine steel knife and forceps, one nickel-plated spreader, both well adapted for the purpose, one improved German silver cutting and twisting scoop, with fine hook on opposite end, one German silver probe, and four German silver hooks attached to cords for quickly securing the fowls; all in a fine velvet-lined case. With each of the above sets we send free one copy of complete directions. Price, \$2.75, postpaid.

Poultry Markers—This small punch is a very convenient method of marking birds for record. Two sizes, large and small. Price, 25c, postpaid.

Climax Leg Bands—For neatness, lightness, security and durability the Climax Bands are unexcelled. They are easy to put on or remove, and no tools are required. The rings are made of spring brass, and so bent that the tag acts as a clasp, holding them securely in place. Always give the breed of fowls the bands are wanted for.

Prices of Climax Bands, prepaid: Per dozen, 25c; per 25, 50c; per 50, 75c; per 100, \$1.35. Sample, by mail, 5c.



We Are
State Agents
for the

**Geo. H. Lee
Chemical Co.**
of
Omaha and New York

The use of this preparation has become so universal, and results are so satisfactory, that most poultry raisers would not know how to keep house without it. It is no longer necessary to dip or dust poultry to kill the lice. A can of Lee's Lice Killer, a paintbrush and a few minutes' work in applying it to the roosts, means all the expense and labor now necessary to keep the fowls free from both mites and body lice. A can of it should be in every poultry house. It kills and prevents mites and lice, and keeps the air in the poultry house pure and sweet (a healthy tar odor), killing disease germs and preventing the other enemies of the poultryman—roup and cholera. Price: 1 quart, 35c; 2 quarts, 60c; 1 gallon, \$1.00; 5 gallons, \$4.00.

Free—With each order for Lee's Lice Killer amounting to \$4.00 we give free one of the Little Aspinwall or Electric Sprayers listed on page 33 of this Catalog.

Lee's Germozone—This is an effective cure for most of the diseases of poultry. It cures roup, cholera, swelled head, canker, and when given occasionally in the drink will prevent these and many other diseases. Roup, canker, swelled head, etc., are the same as "cold in the head" in a human being. Price, 50c per bottle or box of tablets sent by mail postpaid.

Lee's Tonic Powder—This is a concentrated food for poultry with the coarser and cheaper matter left out. One pound of the tonic powder is equal to ten pounds of ordinary poultry food. It can readily be sent by mail, and otherwise handled more conveniently. Price 25c; by mail postpaid, 35c.

Lee's Insect Powder—While our Lee's Lice Killer has to a large extent replaced the use of insect powders for poultry, there are situations where the insect powder can be used to most excellent advantage. It is especially desirable for little chicks, as the Lice Killer is too strong for the little fellows, unless very carefully used. Price, 25c; postpaid, 35c.

Peerless Bug Killer—The best exterminator known for bedbugs, roaches, ticks and all vermin that infest the home. Price 25c; not sent by mail.

Peerless Gopher Killer—A sure method of exterminating gophers, ground squirrels and rats. Price 75c; per dozen, \$8.00.

Flyo Curo—Relieves cows and other animals from the torments of flies and mosquitos. Price per quart, 50c; per gallon, \$1.25.

Lee's Sheep Dip—This dip is quite well known among the sheep raisers and is the most satisfactory, as it not only destroys ticks and insects, but stimulates the growth of wool. Put in 1 and 5 gallon cans and 50 gallon barrels. Special quotations.

POULTRY SUPPLIES—Continued

Lee's Smoke Extract—A quick and perfect meat curer; does the work in ten minutes of days of smoking in a smokehouse. 12 oz bottle, 50c; 32 oz bottle, 75c.

Chemical Dehorner—For dehorning calves. This is done by applying the liquid to the head of the calf at an early age, before the horn breaks through the skin. It is very easy to use, and is certain in its effect. It is much more humane than the process of dehorning with a knife or saw. One size only. Price 50c.

Besides the Complete Line of Goods manufactured by the Geo. H. Lee Co. we carry a stock of the following well-known remedies:

Cresozone—A liquid disinfectant and germicide highly recommended for the destruction of lice, fleas and vermin of all kinds. Price 50c per quart.

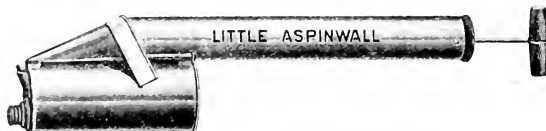
Sheridan's Condition Powder—A general condition powder of great power for stock of all kinds; a splendid egg producer. $\frac{1}{4}$ lb 25c, 1 lb \$1.00.

Flood's Roup Cure—This remedy we guarantee to cure Roup, Colds and Canker. Price 50c, postpaid.



Lambert's Death to Lice—This powder needs little recommendation from us, as it is one of the best known insect powders on the market. Price, 5 oz 10c, 15 oz 25c, 48 oz 50, 100 oz \$1.00. If sent by mail add 1c per oz for postage.

Avenarius Carbolineum—This great German preparation is not only sure death to insect life of all kinds, but is a wood preservative and will make fence posts and building material practically everlasting. Price, 1 qt 60c, $\frac{1}{2}$ gal \$1.00, 1 gal \$1.50, 5 gal \$7.00. Special quotations on large quantities.



The Little Aspinwall Sprayer—The handiest thing in the world for applying liquid lice killers and disinfectants. Tin, each 90c; brass, each \$1.25.

Special Printed Matter on Any Subject in this Catalogue Sent on Application.
CORRESPONDENCE SOLICITED

splendid medium for feeding animal matter and stimulants. \$1.50 per 100 lbs; \$25.00 per ton.

Feed Wheat—Market price.

Feed Corn—Yellow Dent, market price.

Cracked Corn—\$1.50 per 100 lbs; \$25.00 per ton.

Feed Meal—A cheap grade of Corn Meal. Per 100 lbs \$1.50; per ton \$25.00.

Cracked Rice—An excellent feed for small chicks. Per 100 lbs, \$2.50.

Hulled Oats—The groat, or, as the name implies, the oat with the hull taken off, is a very nutritive feed for small chicks. Per 100 lbs, \$2.50.

ANIMAL FOOD.

The animal matter or meat required by poultry is most economically and conveniently supplied by the use of the following meats prepared by Darling & Co., of the Union Stock Yards at Chicago.

Beef Meal—Made from meat, bone, blood and the liquor from cooking. Rich in albumen and protein. It is a nitrogenous food and a great egg producer. Price per lb, $3\frac{1}{2}$ c; per 100 lbs, \$3.00.

Ground Beef Scraps—The Beef Scraps are scientifically prepared, are free from all moisture and therefore are always sweet and wholesome. Their nutritive value is very high, more than twice that of fresh beef. They are the cheapest and best animal matter food for poultry and well deserve their popularity amongst poultry raisers. They contain more greases than the above Meal, so we consider them better to feed for market than for eggs. Per lb, 4c; per 100 lbs, \$3.50.

MINERAL FOODS.

Granulated Bone—A wrong impression exists regarding bone. Fresh or green bones contain 53 per cent. moisture and 12 per cent. grease, so when you buy fresh bones you pay for 65 pounds of useless material in every 100 pounds you buy. Our bone is made from fresh, green bones, with the moisture and grease taken out, leaving nothing but the phosphate of lime and nitrogen. These are the only feeding properties of bone, so when you buy our bone you get all the feeding properties without buying or paying freight on moisture or grease, and you get an article that will keep in any kind of weather if kept dry. Bone is a good egg producer. Price per lb, 2c; per 100 lbs., \$1.75; per ton, \$30.00.

Fine Ground Raw Bone Meal—This also is made from fresh green bones, and is the same stock as the Granulated Bone, but has gone through a finer sieve. It is ground very fine and is used to mix in mash feed. Price per lb, 2c; per 100 lbs, \$1.75; per ton, \$30.00.

Crushed Oyster Shells—These are made from clean, bright shells, and as oyster shells contain 98 per cent. of pure bicarbonate of lime, they are probably the best producers of egg shells of anything on the market. Price per lb, $1\frac{1}{2}$ c; per 100 lbs, \$1.25; per ton, \$20.00.

Granulated Clam Shell—Clam shell has as great, if not greater, percentage of bicarbonate of lime than oyster shell, and while it does not present as sharp an edge it is just as good to aid the digestion. Price per lb, $1\frac{1}{2}$ c; per 100 lbs, \$1.25; per ton, \$20.00.

Mica Crystal Grit—This is made from granite rock, and contains quartz, which is the hardest rock substance, and mica, a flaky substance. In dissolving in the gizzard it flakes off, thus keeping itself sharp. As a grinder it has no equal. It also contains iron, which is very beneficial both to the fowl and in flavoring the eggs. Price per 100 lbs, \$1.50.

EGG PRODUCING FOODS

Poultry, to be in the best condition, must have plenty of three classes of foods, viz., Vegetable, Animal and Mineral.

L. & B. Poultry Food—Of all the many foods for poultry, we consider this the most complete grain ration sold, as it combines all the principal grains in the proper proportion, nothing but the best and cleanest grain being used in its preparation. Put up in 100-lb sacks, \$1.50; per ton, \$26.00.

Ground Wheat—This meal contains the entire grain, and therefore furnishes the nutriment more quickly, and it makes a



Thoroughbred Poultry

We make no specialty of any one breed, but as we are in touch with the Poultry Raisers of the Northwest we can supply our customers with almost any breed, and we will guarantee satisfaction in filling any order for poultry, by pairs, trios, or single birds.

State what you want, and let us quote you our price.
We give the best stock at the lowest price.

LILLY, BOGARDUS & CO., Inc.

814 WESTERN AVE., SEATTLE

GEO. LINDER, Jr.

Box 1175

Seattle, Wash.

**BREEDER OF { SILVER
AND
BUFF } WYANDOTTES**

AS GOOD AS THERE ARE IN THE COUNTRY

Winners of All the Principal Prizes at Tacoma
In 1899 and 1900

My Birds are better than ever. Stock and eggs for sale in Season
at prices fifty per cent. less than you can get same for in the east

SATISFACTION GUARANTEED

Eggs for hatching, from Thoroughbred Barred Rocks, next Spring, for \$1.25 per setting; also good cockrels
for sale cheap

STOCK FOODS AND REMEDIES

—MANUFACTURED BY—

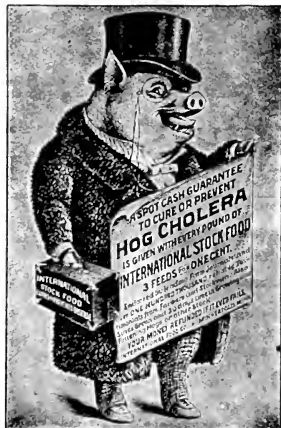
THE INTERNATIONAL FOOD CO., MINNEAPOLIS, MINN.

The Goods Put Up by This Company Are Sold Under a Guarantee

IF WANTED BY MAIL, ADD 10c FOR THE 25c PACKAGES AND 20c FOR THE 50c PACKAGES TO COVER THE POSTAGE.

International Stock Food—A purely vegetable compound. Originated by a practical stockman and indorsed by all the most noted veterinary surgeons. Cures and prevents disease in

International Poultry Food—Is not only a stimulant but a guaranteed cure and preventive of the diseases of poultry. It will increase the egg production in less time and with less ex-



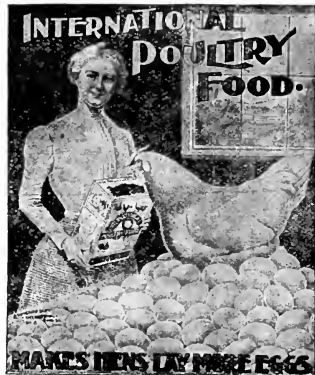
horses, cattle, sheep and hogs, and insures rapid growth in young stock. 65 feeds for 25c; 150 feeds for 50c; 325 feeds for \$1.00; 25-lb. pails, \$3.50.

International Heave Cure—This remedy was originated by a prominent veterinary surgeon for heaves, colds, asthma and broken wind and has been successfully used by him in his practice for 20 years. Full directions and guarantee on each package. 1-lb pkg, only 50c.

International Worm Powder—A perfectly harmless vegetable compound, guaranteed to contain no poisonous or injurious ingredients and to cure animals of worms and other bacteria affecting the stomach and bowels. 1-lb pkg, 50c.

Silver Pine Healing Oil—One of nature's greatest healing oils. For human or animals. Purely vegetable. Heals cuts or wounds quickly and prevents inflammation and swelling. Very soothing. 50c per bottle.

International Colic Cure—Absolutely the quickest relief for spasmodic, gas or flatulent colic, stoppage of water, acute indigestion, grain founder or bloat. One dose cures in from 10 to 30 minutes. Price, \$1.00 per bottle.



pense than any other poultry food in the world. 1½ lb pkgs 25c, 3 lb 50c, 6 lb \$1.00, 25 lb pails \$3.50.

Honey Tar Foot Remedy—Is a splendid application for nail wounds, thrush, corns, quarter cracks or contracted feet. It is neither sticky nor greasy and is quickly absorbed. If your horse's feet are not in good condition he is practically worthless. Honey Tar will cure him. 1-lb tin, 50c; 2-lb tin, \$1.00.

International Gall Cure—Your money will be refunded if this salve ever fails to cure galls of any kind, sore necks or backs. Put up in tins, 25c and 50c.

International Phino-Chloro—A perfect insecticide and germicide. Twenty-five gallons for 50c. It will kill all disease germs and foul odors in and around poultry houses, hog pens, etc. One size only. Price, 50c.

International Harness Soap and Dressing—The best harness dressing on the market. It cleans, preserves and polishes the leather and makes it pliable. Used very extensively by liverymen in almost every city in the Union. Price, 1-lb tin 25c, 10-lb tin \$2.00.

International Quick Cleaner—The best and safest cleanser ever sold. Made of the purest ingredients; perfectly harmless to the finest fabrics or the highest polished surfaces. 1-lb tins 25c.

KOW-KURE

DAIRY ASSOCIATION

LYNDONVILLE, VERMONT, U. S. A.

This corporation is organized under the state laws of Vermont, and exists for the sole purpose of benefiting the dairy by curing the Cow of Profit-Destroying Diseases. The products of this concern are therefore of the highest merit.

A dairy cow is in greater need of a spring tonic than any other animal, man included. Her system is under a double strain, that of producing milk and keeping the organs of her body in repair.

Every cow needs a spring medicine made on purpose for her; something that will clean out the impurities that always get into the system during the winter months. For just this is Kow-Kure made. It prepares her for the coming summer's work; it starts her in the right direction for a large flow of milk, and if she is carrying a calf it makes her private organs strong and sound and prevents her losing it before her time. It makes calving easy and the afterbirth come away quickly and naturally.

CURES OFF FEED. ABORTION. BUNCHES. BARRENESS. SCOURS.

KOW-KURE
THE GREAT COW MEDICINE

For cows only

RETAINED AFTER-BIRTH. CAKED UDDER. GARGET. RED WATER.

Kow-Kure—For cows only; cures cows of lost appetite, scouring, red water, abortion, barrenness, retained afterbirth, milk fever and prevents tuberculosis. It is a safe and powerful tonic, corrects stomach disorders, makes pure blood and causes a larger flow of richer milk.

It is in powdered form, carefully compounded of twelve drugs— which may be divided into four sets, one set acting on the stomach, another on the organs of generation, another on the kidneys and bladder, and the fourth set on the blood.

It is especially designed for the cow, and is the only remedy known that entirely fits her case. General and special directions on each package.

One dessertspoonful or more once each day with a feed of grain, or, better, L. & B. FEED, will cost about five cents a week per cow, or less than one cent per day to use Kow-Kure, and it makes Every Cow Pay.

1½-lb cartons, full net weight..... 50c
3-lb cans, full net weight.....\$1.00

Grange Garget Cure—A cure for garget and milk fever that has stood the test of twenty years and is a complete success. Unlike saltpetre, garget root, camphor and such stomach irritating drugs, it will not injure the butter nor lessen the flow of milk. Give one heaping teaspoonful with regular feed every morning until cured.

Put up in cans, 1½ lbs net weight.....50c

American Horse Tonic is not an ordinary condition powder, but is a safe and powerful tonic, especially designed for the horse, and it takes but a few doses to show how quickly the animal improves under its use. It quickly cures worms, loss of appetite, roughness of the hair or coat, stoppage of water or bowels, all coughs or colds, inflammation of lungs or bowels, recent foundlers, swelling of the glands of the throat, horse distemper and that logy look.

It is put up in separate powders, one dose each. For a tonic, one powder mixed with L. & B. Feed every morning for five days, then omit two days, will secure the best results. If necessary, continue the treatment. Full directions, general and specific, in each box. One dozen powders in each box; price 50c.

KOW-KURE

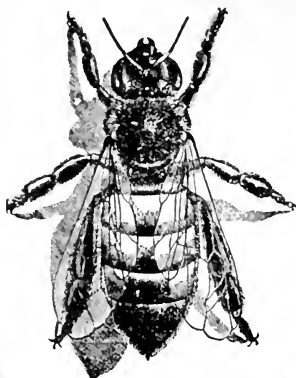
Is a preparation in powder form and is given in the regular feed. It is scientifically prepared from twelve drugs—vegetable. It is made to cure cow troubles, is all medicine and for the cow only. It has stood the test of nine years and is a complete success.

The odd and striking name of KOW-KURE was given to this medicine, that dairymen may be protected against fraud. Take nothing else.

This medicine is made only by the Dairy Association, Lyndonville, Vt., organized under the state laws, a corporation existing for the sole purpose of benefiting the dairy by curing the cow of profit-destroying diseases. As far as known it is the only association of its kind in the world.

Kow-Kure is for sale in your town. (See name on the envelope.) Get it and make a careful trial on some special cow in your herd and see how quickly it will change a losing cow into a paying one.

ROOT'S BEE SUPPLIES



A Beginning.

We cannot recommend to any one without experience more than a small beginning, say from one to six colonies of bees, and the hives and implements needed at first. These, with a good book of instructions, such as the A B C of Bee Culture, will enable you to get the experience necessary to successful bee-keeping. After the first or second year, with a few bees you will be better prepared to enlarge your investment if you think best. If you should invest heavily at first, and because of inexperience or other unfavorable circumstances, should not make the success you expected on the start, the result with most people would be that they would give it up entirely; while if you proceed carefully and with perseverance, you are bound to succeed.

Beginner's Outfit.

If you should go no further, there are a good many beginners who would not know just what, among the many things shown in this catalogue, they would need to order for a beginning. There are some things that you cannot well get along without. In order to assist you to a judicious beginning, we put up an outfit consisting of the hives and implements necessary for a start of two or three colonies of bees. This consists of the following, and is styled our

Beginner's Outfit No. 1.

1 A B C of Bee Culture, cloth.....	\$1 25
1 No. 2 veil	50
1 Clark's smoker	50
5 No. 1 Dov. hives, complete.....	6 00

All shipped together, the price will be \$8.00. Full directions for putting the hives together are always included. For those who can afford it, we would advise, in addition to the above, the following tools, which will be found very convenient, if not quite indispensable:

Daisy foundation-roller	\$ 15
Daisy foundation-fastener	1 00
1 spur wire-imbedder	15
5 lbs. medium brood foundation.....	2 40
1 qt. paint for hives	45
1 Alley's queen-trap	50
1 Porter bee-escape and board complete.....	35

Total additional supplies\$5 00

These, added to Outfit No. 1, compose our Beginner's Outfit No. 2, and costs, complete, \$13.00. These goods go at third-class freight, and weigh less than 200 lbs., and the freight to most points in this and near-by states will be less than \$1.00 on either outfit.

How to Make a Start in Bees.

We advise you to buy black or brown bees in your own vicinity. Bees may be purchased in box hives, anywhere from three to five dollars per colony. They should then be transferred.



give you an idea of the necessary outfit, we have given a list above of the supplies needed. After you have gotten the hives in the flat, nail them up, put in the foundation, and then you are ready to transfer the bees. When they are nicely going on their new set of combs, you can then, if you prefer, Italianize them. From one colony, by good management, you can increase, by dividing, to four or five during the season. For directions, see Artificial Swarming, and Dividing, in the A B C of Bee Culture; cloth, \$1.25. Such a start can be made very cheaply, and at the same time give you valuable experience in the care and management of bees.

How to Italianize an Apiary.

There are several ways this can be done: First, by buying tested queens for every one of the colonies containing black or hybrid queens. The old queens should, of course, be removed, and the hive left queenless for a couple of days before the new mothers are introduced. This method, although the surest, is rather expensive.

A cheaper way, and the one we would generally recommend, is to buy untested Italian queens. Nine-tenths of the untested we send out will prove to be purely mated; and then, if the beginner loses his queen in introducing, the loss of an untested is only half that of a tested.

Prevention by Caging the Queen.

In the production of comb honey there is only one reliable method, and that means so much work that the majority of beekeepers do not practice it. Cage the queen of each colony over the brood-nest at the approach of the swarming season, and then in eight days cut out the queen-cells, and in eight days cut the cells again; but if you haven't a large apiary, and you have spare time nights and mornings, the labor will not figure much. The cutting-out of the cells alone or giving plenty of surplus room will help greatly to discourage, if not prevent swarming altogether.

Clipped-Wing Plan, or the Easiest Way of Managing Swarming.

But most apalists think it an advantage to let the bees swarm once; and as all their queens' wings are clipped, when the swarm comes forth the queen is caught in a Miller queen-catcher cage as she is crawling around in front of the entrance. The old hive is then removed to a new stand, and an empty one (several such should be kept in readiness) put in its place when the queen is put in front of the entrance caged. The bees, on discovering the absence of the queen, will soon return pell-mell to the old stand. The surplus chamber, if there was one on the old hive, is put on the new one now on the old stand.

This manner of catching the swarm is so little labor that the "women-folks" do not object to it, since there is no handling of the swarm itself, no climbing of trees after it, and it is all done, practically, by catching the queen. The empty hive is easily handled, and the old hive need be moved but a few feet, when you will take care of it when you get home. You will also need to release the queen.

The Entrance-Guard Plan.

In place of clipping the queen's wings, many apalists prefer the entrance-guards, one of which is attached at every entrance. The queen cannot, of course, pass the perforated zinc, and there is, in consequence, no danger of her getting lost in the grass. Then if the women-folks won't go near, they will try it over again to the old hive; but you may be sure they will try it over again unless you give them a new hive full of empty combs or frames of foundation. They will then go to work, and probably give it up for the rest of the season. This plan has the advantage that everything will take care of itself till you get home, and there is no danger, either, that you will lose any swarms.

BEE SUPPLIES—Continued

The Alley Trap.

This goes one step further, and catches the queen in a compartment by herself. The whole trap may then be detached, and the queen liberated in a new hive of combs on the old stand, carrying out the plan outlined under the "clipped-queen" plan above.

Prevention of Swarming When Running for Extracted Honey.

This is far easier to accomplish. Give the queen unlimited room for egg-laying, and, if necessary, put on another eight-frame body. From the lower story draw out a couple of combs and put them above, filling out the space in both stories with empty combs or frames of foundation. Extract from both stories as often as need be, or put on a third story of empty comb or foundation. The main thing seems to be to give the queen and bees an abundance of room. You may ask why you could not do this for comb honey. Before the bees go into the sections they will fill the combs next to the brood with honey; and if the season should be short you would get no honey in the sections. But in extracting you can take from the bees just as much as, in your judgment, the bees can spare. This subject is treated far more fully in A B C of Bee Culture. Price, in cloth, \$1.25.

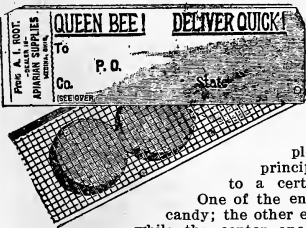
Queens.—Grade and Price of Queens.

Untested Queen—January, February, March, \$1.50; April, May, June, \$1.00; July, August, September, October, 75 cents; November, December, \$1.00.

Tested Queen—January, February, March, \$2.00; April, May, June, \$1.50; July, August, September, October, \$1.25; November, December, \$1.50.

Cages for Queens.

As the Benton cage is so far superior to all others for mailing, is the only one we offer for the purpose. To introduce, all that is necessary is to pull out the cork, and the bees "do the rest;" i. e., cut out the candy and liberate the queen by a well-known principle. The three-hole principle makes the cage, to a certain extent, climatic. One of the end holes is filled with candy; the other end hole is ventilated, while the center one receives ventilation from the ventilated one. When the bees go over the contains they will seek the center and warmer hole next to the candy. In hot climates they will naturally occupy the ventilated hole. Another feature of the cage is, that the holes are so small that the concussions through the mails do not jostle the bees about so much. Each, 5c; per 10, 40c.



West's Queen-Cell Protector.

These are to prevent bees from gnawing into and tearing open cells given them at certain times of the year. When a queen cell with one of these is placed in the hive, it can readily be picked out from others that may have started up elsewhere in the hive. With them the apiary can be requeened during the swarming season at very little expense; and this, to a certain extent, will control swarming. Complete directions to use accompany each lot of cages. We also furnish spiral cages, to be slipped over these cell protectors, as shown in the illustration, at the right. These are designed to hold the virgin queen, after she hatches, till she can be disposed of. Each, 10c; per 10, 80c.

Feeding.

Bees are fed for two purposes: To stimulate brood-rearing, or to supply them with necessary stores for winter. For stimulative feeding, there is nothing better than the

Simplicity Feeder.

This is to be filled with syrup made by mixing together granulated sugar and water in equal proportions by measure,



and heating until thoroughly dissolved. This feeder may be placed at the entrance at night, over the brood-frames, by placing on top of the hive, or in the brood-nest itself, if a couple of frames are removed. Feeding should generally be done at night, so that the syrup can be all taken up and disposed of before morning. Each, 6c; per 10, 50c.

The Gray Simplicity Feeder.

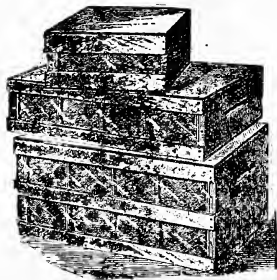
This is simply a Simplicity feeder arranged with a glass slide. It is designed to be placed tight up against the entrance; and after filling, the glass is pushed back to cover up the entire feeder. Each, 20c; per 10, \$1.25.

The Miller Feeder.

This is designed to be placed inside of a super, or in the upper story on top of the brood-frames. It has two compartments for syrup. The passageway to the bees is directly over the center of the brood-nest, at a point where there is the greatest warmth, and this makes it possible for bees to take down the syrup on cold freezing days, when the apiarist has been so negligent as to leave this operation for the last thing. Strips of wire cloth are nailed to bottom edges of the two outside boards forming bee-passages, so that it is impossible for the bees to get into the syrup and get drowned, and yet they are enabled to take out the last drop. To feed, simply raise the cover; and if the colony needs 10 pounds of syrup fill one compartment about two-thirds full. If it needs 20 pounds, fill both compartments nearly full. The amount of stores can be quite accurately gauged on the same plan, pro rata. This measures 11½x18x4½ inches outside, and will go inside of an eight-frame dovetailed super or any of the hives we sell.

Complete directions for nailing these feeders and preparing them so they will not leak are sent with each lot in flat. Each, 30c; per 10, \$2.50.

Price List of Shipping Cases.



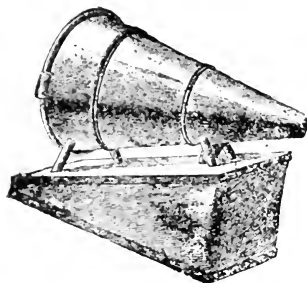
Size.	In Flat.			
	Each	1	10	100
48-lb. double-tier shipping-case	25	16	\$1 60	\$14 00
24-lb. single-tier shipping-case	20	14	1 40	12 00
12-lb. two-row shipping-case	15	12	1 00	9 50

Glass extra in flat.

BEE SUPPLIES—Continued

Clark's Cold-Blast Smoker.

The Clark cold-blast smoker has probably exceeded the sales of all others put together, the annual number sold amounting to from fifteen to twenty thousand. Besides being cheap in price it is well made, of good size, reliable and serviceable. It is a breech-loader, and therefore is easily replenished by simply revolving the sliding-door—no hot coals to replace and no burning of fingers. It is easily lighted with a match, and when once well going it will not go out.



Price List of Clark's Cold-Blast Smoker.

One to four smokers, 50c each; by mail, 70c.
Prices of larger quantities on application.

Coggsall's Bee-Brush.

This is a sort of whisk-broom especially adapted and made for brushing bees. The strands are thinned out, and longer, so as to give a soft, pliable sweep to the combs. For the wholesale brushing of bees off combs in extracting, we do not hesitate to pronounce this the best. Price, 15c; postage, 6c extra.



Hives.—Size of Hives.

Before describing our hives a few words regarding sizes may not be amiss. In the first place, the Langstroth frame, 9 1/4 inches deep by 17 1/2 long, has been, by common consent, accepted as the standard for the United States, Canada, West Indies, Mexico, Australia and New Zealand, insofar as there is any accepted standard at all. This size of frame, aside from the fact that it is standard, has some decided points of merit. It tiers up well; being



shallow, it is easily withdrawn from the brood-nest, and hence is more easily handled than a deep frame; it brings the brood close up to the surplus, and gives a large surface for it; and, what is of considerable importance, it uses to the best advantage a standard width of barn-boards for the construction of the hive to contain them. A deep frame, on the contrary, requires wider lumber. The size of the frame, then, regulates the length and depth of the hive, but not its width. A Langstroth hive never contains less than eight frames nor more than twelve. The eight-frame size seems to be by all odds the leader, by ten to one, of all the rest put together; for, indeed, it seems to be the best adapted for the most of the localities. The eight-frame size is just large enough for the requirements of the average queen; and if she fills up the brood-nest, the surplus will be crowded just where we want it—in the supers.

While we make both the ten and twelve-frame Dovetailed hives, and recognize that there is a legitimate demand for them in some localities, we strongly urge the beginner, and others who

have not decided this question for themselves, to adopt the standard eight-frame size. It will probably be best adapted for your locality as it is in the great majority of them.

The particular feature of this hive, and hence its name, and the one which has made it rise so rapidly into popularity, is the dovetailed—or, more properly speaking, the lock corner. Unlike the old-fashioned lap, miter, or halving plan, it will not gap or pull loose, but will successfully resist all climates, and even a California sun. Our Dovetailed hives are easily put together, and when properly nailed they have five times the strength of the old-fashioned hive bodies depending merely on the strength of the nails; hence, when once put together square, they will stay so. All our dovetailing is done on special automatic machinery that makes smooth, accurate, polished, square cuts.

Descriptive List of Dovetailed Hives

No. 1 Dovetailed hive, 8-frame, complete, a 1 1/2-story hive for comb honey, as shown, includes bottom-board and cover; a body with eight improved Hoffman thick-top frames and plain division-board; one super with a follower and wedge; six section-holders with slotted separators, sections, and foundation starters.

No. 1E is the same hive leaving out sections and starters; everything else mentioned is included.

No. 2 Dovetailed hive, 8-frame, complete, includes a bottom and cover, a body with eight Hoffman thick-top frames, division-board, two supers with followers and wedges, twelve section-holders, with sections, separators, and foundation starters, making a 2-story hive for comb honey, as shown.

No. 2E is No. 2, with sections and starters omitted.

No. 5 Dovetailed hive, 8-frame, complete, is a 2-story hive for extractor, and includes bottom and cover, two bodies with sixteen Hoffman frames and two division-boards; foundation starters for frames, and No. 13 zinc honey-board, as shown.

No. 5E is the same as No. 5, with starters and honey-board omitted.

Dovetailed Hives at Root's Prices.

Order by number and carry out the price.

Number and Name.	Nailed each.	In flat.		Weight of 10.
		1	10	
No. 1 Dovetailed hive, complete.....	\$1 70	\$1 30	\$12 00	290 lbs.
No. 1E Dovetailed hive, empty.....	1 40	1 10	10 00	270 lbs.
No. 2 Dovetailed hive, complete.....	2 30	1 70	16 00	370 lbs.
No. 2E Dovetailed hive, empty.....	1 80	1 35	12 50	330 lbs.
No. 5 Dovetailed hive, complete.....	2 00	1 50	14 00	330 lbs.
No. 5E Dovetailed hive, empty.....	1 65	1 25	11 50	320 lbs.

Write for prices on larger quantities.

Five hives furnished at the same rate as ten.

Any of above hives furnished with frames pierced, and wire included without extra charge if so ordered. If wanted, add P. W. to the number in ordering.

Honey-boards may be added at price in table of honey-boards.

Hives furnished with gable covers, instead of flat cover, same price if so ordered. If wanted, add G. to the number in ordering.

Western Hives.

We have them. They are made from best Oregon pine, and are the best cheap hives on the market. Note the prices.

	Each, Nailed.	Each, In flats.	10.
No. 1, 8-frame	\$1 40	\$1 20	\$11 00
No. 1E, 8-frame	1 10	1 95	8 75
No. 2, 8-frame	1 75	1 50	14 00
No. 2E, 8-frame	1 40	1 20	11 00

Ten-Frame Dovetailed Hives.

We will make the Dovetailed hive 10-frame instead of 8-frame, in any of the above numbers, as follows:
In flat, 25c extra.

BEE SUPPLIES—Continued

Perforated Zinc.

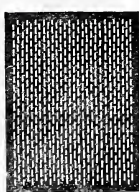
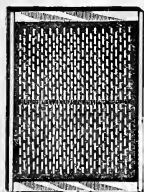
This is used between the upper and lower stories, to prevent the queen from going above. It is also used in entrance guards, for queen and drone traps, etc. The size of the perforations in our make of zinc is 17-100. This is found to effectually stop all queens and drones from passing through, but allows the workers to pass easily without hindrance.



Price List of Perforated Zinc.

Zinc strips, 1 row holes, $\frac{3}{4}$ x 18 to 19 $\frac{1}{2}$ inches, per 100.....\$1.00
Perforated zinc sheets, 28x96 inches, each.....1.40
Less than a sheet of zinc, 10c per foot. By mail, 10c per foot extra. Zinc strips may be sent by mail for 1c each postage.

Honey-Boards.



Their chief use is for confining the queen in the brood-chamber, and we have had many testimonials from large bee-keepers of their value for this purpose, particularly for extracting.

Price List of Honey-Boards.

Order by number and name, and carry out the price.
No. 11, 8-frame unbound zinc, 12x19 $\frac{1}{2}$, 20c each; price of 10, \$1.50; weight of 10, 8 lbs.
No. 2 Simp, wood-bound zinc, 14 $\frac{1}{2}$ x19 $\frac{1}{2}$, 25c each; price of 10, \$2.00; weight of 10, 10 lbs.
Price, 10 for 25c; per 100, \$2.00.

Porter Bee-Escape.



Price, escapes only, 20c each; \$2.25 per doz., postage paid. We furnish these to dealers at manufacturers' prices.

Board complete for Dove-tailed hive, 35c each.

It is almost superfluous to say anything in favor of this most excellent device. No well-regulated apiary can be complete without at least a few bee-escapes, and the Porter seems to be the best.

Bee-Entrance Guards.



Price, by mail, 10c each; 10 for 60c.

These are placed in front of the entrances for various purposes. They may be used in swarming time to prevent the queen from going out, or on the hives whose drones are not such as you want to breed from at a time

when you are rearing queens.

Alley's Queen and Drone Trap.

It is designed to automatically catch and cage the drones in an apartment by themselves. They can then be carried to another apiary, or be destroyed, as circumstances require. The trap will also catch the queen when a swarm issues, and hold her confined

until the apiarist can give her his attention. As she cannot get away, the bees will in all likelihood return into the hive. Or, if you happen to be on hand when the swarm comes out, the trap with the queen can be placed among the flying bees. The latter will probably cluster about the queen, and they may then be hived. Price, 55c each; \$4.50 per 10.

Daisy Foundation Fastener.

Price, with lamp, \$1.00; without lamp, 75c; weight without lamp, 5 lbs.

This is the best for putting starters into sections. Nothing could be more simple, or more easily operated than this machine; and we are sure it will put starters in better and faster than any machine before produced. With this a boy or girl will put starters in about 500 sections per hour, and do it nicer than any of the presser machines we formerly sold. Complete directions accompany each machine.

Honey-Knives.

This is by no means equal to the Bingham or Abbott for uncapping alone, but useful for other purposes, such as scraping propolis off bottom boards, covers, etc., for transferring and cutting chunk honey generally. It has a thin blade, with a keen edge, beautifully finished. The Quinby is the same knife, with the point curved. Each, 85c; postage 5c.



The "Novice" Honey-Knife.

Abbott Uncapping-Knife.



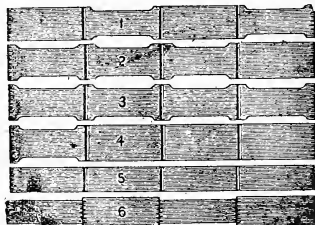
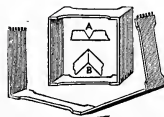
This style of knife is altogether the best for uncapping. It is now made of the best American steel, and an exact copy of Bingham's, except the holes. We send this knife when order does not specify which kind is wanted, because we consider it the best. Each, 85c; postage 5c.

Daisy Foundation-Roller.

Price 15c; by mail, 18c.

All that is necessary is to lay the sheet on the wires, dip the roller into water to prevent the wax from sticking, and pass it along the edge of the foundation. The first time over the pressure should be light, and increased until the edge is firmly pressed into the wood.

Price List of 4 $\frac{1}{4}$ -Inch Sections.



White, any width, price of 1000, \$3.90; 3000, \$11.25.

Cream, 1 $\frac{1}{2}$ and 1 15-16, price of 1000, \$3.75; 3000, \$9.85.

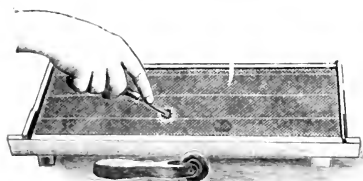
White, 50c per 100, or 500 for \$2.15.

Cream, 45c per 100, or 500 for \$2.00.

Write for special prices on large quantities.

BEE SUPPLIES—Continued

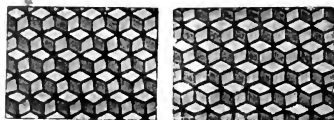
Spur Wire-Imbedder.



Price 15c; by mail, 18c.

This is a little tool like a tracing wheel, with the teeth set in such a way as to straddle the wire while it is in the act of imbedding. It is the best tool we have ever tried for the purpose.

Comb Foundation.



All our comb foundation is made from pure bright yellow beeswax. The lightest-colored is selected for thin foundation for sections, and the rest is made into comb foundation for the brood chamber.

Table of Prices of Comb Foundation.

When you order, be sure to tell which weight you want, and give price.

Small samples of each kind will be mailed free. We guarantee foundation furnished fully equal to samples in every respect. Send for samples and compare with other makes, and see if ours is not fully equal, if not superior, to any other on the market.

Name of Grade—	Sq. ft. per lb.	Price per lb. in lots not less than:		
		1 lb.	10 lbs.	25 lbs.
Heavy brood foundation	4 to 5	\$0.47	\$0.46	\$0.45
Medium brood foundation	5 to 6	.47	.46	.45
Light brood foundation	7 to 8	.50	.49	.48
Thin surplus foundation	10	.57	.56	.55
Extra thin surplus foundation.....	11 to 12	.62	.61	.60

For 100 lbs or over, write for wholesale price.

Foundation packed for mailing requires 25c per lb postage. Not less than 1 lb of brood foundation, L size, can be packed safely for mailing, nor less than 3 lbs of larger sizes. Brood foundation is made in one regular size, 7 1/4 x 16 1/2.

Thin and extra thin surplus is in sheets one regular width, 3 3/4 inches, and 15 1/2, 16 1/2, or 19 1/2 inches long.

Price List of Rubber Gloves.

Ladies' sizes, Nos. 6, 7, 8 and 9.....\$1.35; postage 5c
Gents' sizes, Nos. 10, 11 and 12.....1.45; postage 5c
Extra long driving, Nos. 13 and 14.....1.70; postage 10c

Mark size of hand on sheet of paper when ordering.

If you order by number, remember that in rubber you need two sizes larger than you wear in kid; i. e., if you wear No. 6 in kid, you will need No. 8 rubber.

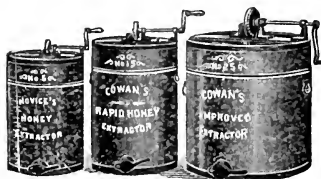
Manum's Swarm-Catcher.

Price, with pole, \$1.25; without pole, \$1.00.

We have tested and examined many swarm-catchers, but have never found anything that would begin to compare with the Manum. It is simply a wire-cloth basket with a lid to close it. To have a swarm whose queen is at large with the bees, open the basket, as shown; push it up around the cluster of bees.

jar the latter off the limb, and close the lid by raking it against a lower limb, so as to throw it over on top. Half or two-thirds of the bees will be in the basket. Adjust the legs of tripod so that the basket will be suspended in the air, where the bees are flying the thickest. They, attracted by the bees inside, will cluster on the outside of the basket. While the bees are clustering, prepare the hive, if you have not already done so. This done, go back to the catcher, which you will find has caught all the bees. Very gently lift up the two front legs of the tripod, fold them against the main bar, and then carry the whole to the empty hive; invert the basket and dump. Close the hive, and the hiving is done. This device will reach a swarm twenty feet from the ground; it is light and easily handled. After the bees are once in the basket they cannot escape, and the prisoners will draw the others. The great feature of the device is that it will stand alone, and hold the basket where the bees are flying the thickest, without any one holding it, while the apiarist in the meantime is preparing a hive elsewhere.

Honey Extractors.



Showing the Relative Sizes.

The above cut will show, better than anything we can say, the relative sizes of the three machines we build for Langstroth frames. They weigh respectively 25, 45 and 117 lbs, unerated, and the diameter of the cans are, respectively, 17, 20 and 28 inches.

Price List of Extractors.

No. 15, Cowan Reversible, 2 frame	\$12.00
No. 18, Cowan Reversible, 2 frame	15.00
No. 25, Cowan Reversible, 4 frame	23.00

Bee Veils.

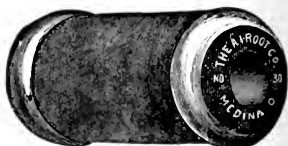


Our veils each contain 1 1/4 yards of the best material for the purpose. They are well made, with rubber cord in the top to fit around the hat, and the lower edge is bound with blue ribbon to prevent fraying.

No. 2, cotton, with silk face, 50c.

Tinned Wire.

No. 30 tinned wire seems to be the most suitable of any for wiring frames. We keep it in stock of the following sizes:



Sizes furnished—	Each.	Dozen.	Postage.	
			Each.	
3/4-oz spools No. 30 tinned wire	\$0.03	\$0.30	\$0.02	
1/2-lb spools No. 30 tinned wire .....	.12	1.20	.06	
1/2-lb spools No. 30 tinned wire .....	.20	2.10	.10	
1-lb spools No. 30 tinned wire .....	.30	3.30	.18	
5-lb coils No. 30 tinned wire	1.00	....	...

SPRAY PUMPS AND MATERIALS

For Spraying Trees and Shrubbery, Painting, Whitewashing, etc.

The subject of spraying fruit trees and small fruits has been so thoroughly discussed and written up in all its details and different phases in fruit growing periodicals and agricultural journals, coupled with the fact that every fruit growing state has its own Experimental Station, Agricultural Society or College from which documents and bulletins are issued free to its residents on application, giving results of its experiments, different formulas for all kinds of insects and trees, in the most approved and scientific manner, containing complete information, describing the different insects, the formula to use, and how and when to apply it, thus establishing the fact that spraying does pay, and is necessary to insure crops. On application we give some valuable tables telling How and When to spray.



Fig. 639

The spray pump shown in Fig. 639 is constructed entirely of brass, a material that is not affected by the poisonous arsenites used in different formulas for spraying fruit trees, vines and shrubbery. They are so arranged that the labor of pumping is all done on the downward stroke of the piston and nothing on the up. The effect of this operation while pumping is to hold the pump down. The foot rest steadies the pump, holding it in proper position.

They are provided with a large air chamber, and have ball valves; the pressure is held uniformly in the air chamber and on the hose, so that the nozzle throws a continuous spray, and is not affected by the movement of the plunger. The operator is enabled to keep a constant pressure on the nozzle of from 50 to 100 lbs. with very ordinary exertion. Will throw a solid stream 50 feet, and are of unusual value for washing windows and buggies, extinguishing fires, sprinkling lawns, flowers, etc. For spraying are arranged so as to discharge a fine jet in the bottom of the bucket to keep the solution thoroughly mixed and agitated, a feature peculiar to these pumps only, and a very necessary feature to a spray pump. The pumps are also provided with a sprinkler for flowers. Price, \$3.50. With 8 ft iron extension pipe, \$3.75.

No. 601. Is the same as 639 without the foot rest; having a clamp that fastens it to the side of a pail or whatever vessel contains the liquid. Price \$3.00. With 8 ft extension pipe, \$3.50.

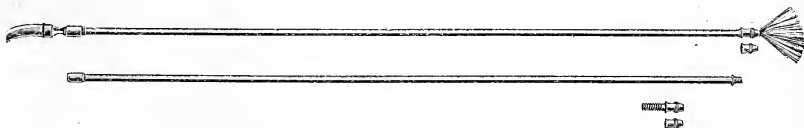


Fig. 480

EXTENSION PIPE

This article seems to be so generally misunderstood that we wish to call particular attention to it. A great many bucket pumps have been condemned for the reason that dealers do not insist on their customers buying a pipe extension. You will readily understand that a fine mist spray cannot be thrown over 12 to 15 feet, and it is positively necessary that an 8 foot pipe extension be used with each pump. By this means the water is carried solid to a distance of 10 feet and sprayed from that point, which enables the user to reach the highest tree. Price, 8 ft pipe, 75c. With stopcock, \$1.25.

All nozzles fit our pipe extension and pumps.

If Vermorel or Bordeaux nozzles are wanted with any of our pumps, add 50c to the price listed.

A SPRAY PUMP FOR \$1.25

The Faultless Sprayer, made of brass, throws a spray as fine as mist, kills, drives away and exterminates every living thing obnoxious to yourself, your animals or your crops. Is adapted for the destroying of every kind of insect. One-half teaspoonful of Paris green and once filling with water is sufficient to destroy all the bugs on 1300 hills of potatoes.

The Faultless Sprayer is absolutely the best constructed sprayer of its class ever offered to the trade. For strength and durability it has no equal. The tapering tube to air chamber gives great force to the spray, carrying it to the greatest possible distance.

This tapering tube also allows the air chamber to be fastened to the tank in the most substantial manner. The tube of air chamber is soldered to top of reservoir and also supported by a broad strap of metal passing over point of tube. The point of air chamber and small tube through which the liquid passes are thoroughly protected from damage in use or shipping. Piston rod is spring steel wire and cup leather plunger. Price, \$1.25. Sent to any address, charges paid, for 25c extra.

DOUBLE ACTING BARREL PUMPS

The Myers Barrel Spray Pump is constructed on the most improved plan and in harmony with the requirements that have been developed by scientists in charge of experiment stations.

It has our patent submerged cylinder, is double acting, has patent expansive plunger bucket, large air chamber to cushion the spray, is provided with two discharge ports (one on each side), of which one or both can be used for spraying. The base is properly shaped to fasten on the side or head of barrel, has steel pins, long handle, and is fitted with brass upper and brass lined lower cylinders with ground brass check valve and brass seat. No rubber or leather valves. It is very powerful and easy to operate; will throw an even, mist like spray over any fruit tree, and will throw a solid stream 60 feet from the point of the nozzle. With the proper hose and pipe extension these pumps are adapted for use in vineyards, gardens or orchards, for the extermination of any kind of insects that are injurious either to the fruit trees, vines or foliage. ALL BARREL PUMPS FITTED WITH AGITATOR WITHOUT ADDITIONAL CHARGE.



Fig. 660

FIG. 660—PRICES WITHOUT BARREL

Pump alone, with suction pipe, strainer and jet agitator.....	\$ 7 50
Pump complete, with suction pipe, strainer and jet agitator, 5 ft. ½-in. 3-ply hose and vermored nozzle.....	9 00
Pump complete, with suction pipe, strainer, jet agitator, 2 leads of ½-in. hose, with vermored nozzles.....	10 50
If mechanical agitator is wanted in place of jet add \$1 to list price.	

THE PERFECT BARREL PUMP

Fig. 655 represents our **Perfect Barrel Spray Pump**, which is manifestly the best barrel spray pump ever offered to the trade. It is constructed on the well known principle of our regular Myers Barrel Spray Pump, shown and described on this page, which principle is, without question, the best that mechanical skill and ingenuity can conceive, it being single acting in the suction and double acting in the discharge, i. e., it discharges half the water on the up stroke and half on the down stroke of the handle. It requires but one-half the power expended to operate the ordinary spray pump.

It has an exceedingly large air chamber, which is very necessary (especially when two leads of hose are used), in connection with the mechanical construction above described, which enables the operator to work this pump under pressure with much less exertion than is required with other large spray pumps.

Construction—The main body of the pump is all air chamber, excepting what is taken up by the small tube upper cylinder. The cylinders are brass and brass lined, fitted with patent expanding plunger, and it has brass valve seat and brass check valve. The base is separate and can be removed. All parts can be removed by disconnecting the handle and removing the lower cylinder cap.

The pump is fitted with jet agitator without extra charge. When fitted with mechanical agitator, as shown by Fig. 655, an extra charge of \$1 will be made.

We recommend the Perfect Barrel Spray Pump as a thoroughly first class article, and guarantee it to give satisfaction.

FIG. 655—PRICES WITHOUT BARREL

Pump alone, with strainer and jet agitator.....	\$12 00
Pump complete, with suction pipe, strainer, jet agitator, 5 ft. ½-in. 3-ply discharge hose, with vermored nozzle.....	14 00
Same outfit with two leads discharge hose and two nozzles.....	15 00



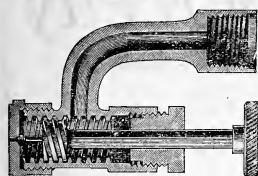
Fig. 655

Same outfit with two leads discharge hose and two nozzles.....

ANY OF OUR PUMPS MOUNTED ON BARRELS FOR \$1.50 EXTRA

SPRAY NOZZLES

MYERS GRADUATING VERMOREL SPRAY NOZZLE



MYERS GRADUATING SPRAY NOZZLE
Fig. 552

Fig. 764 is constructed on the general plan of the regular Vermorel nozzle, with the improvement that the spray can be graduated from a fine mist up to a solid spray, carrying the stream a much greater distance, or can be shut off entirely. This is accomplished by adjusting the screw plunger shown in the sectional view, by means of thumb nut. The degorger is operated by the screw plunger instead of spring.

Nozzle for $\frac{1}{4}$ inch pipe. Price, each..... \$1.00
Nozzle fitted for $\frac{1}{2}$ inch hose. Price, each..... 1.25

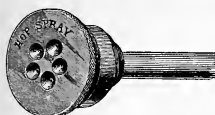
BORDEAUX SPRAY AND SOLID STREAM NOZZLE

Use This Nozzle for Whitewashing

This nozzle will throw a fine fan-shaped spray and will readily free itself, should it become clogged, by turning the cock handle. It will throw a solid stream or may be shut off altogether, as desired.

Price, each \$1.00

HOP NOZZLE



No. 553

Fig. 553 represents a nozzle especially designed for use in hopyards, vineyards, or any place where delicate vines are to be sprayed. This nozzle, being arranged with five openings, is really a combination of five Cyclone Nozzles, throwing a very broad, fine spray, which covers an entire hop vine at one sweep, and has no projections that are liable to catch or break vines. Fitted for $\frac{1}{4}$ inch pipe or $\frac{1}{2}$ inch male end.

Price, each \$1.50

IMPERIAL SPRAY NOZZLE

An improved Spray Nozzle which will throw a mist like spray. This nozzle is improved over the regular Myers nozzle as follows: The nozzle can be cleaned by simply removing the cap.

Price, each \$0.50

CYCLONE NOZZLE



No. 550

Fig. 550 is so arranged that the disc or cap as shown can be unscrewed and cleaned at any time. They are fitted to attach $\frac{1}{4}$ inch pipe or $\frac{1}{2}$ inch male end, and can be used with any of our pipe extensions. The spray opening is at the side as per Fig. 550, or straight away as per Fig. 551.

Price, each \$0.80

HOSE REDUCER

Hose Reducer, used to reduce hose to $\frac{1}{4}$ inch pipe. It is used to connect an ordinary hose coupling in pipe extension.

Price, each \$0.25

BRASS Y CONNECTION

Brass Y which is tapped for $\frac{1}{4}$ inch pipe. It is also threaded to fit any of our spray nozzles. Two nozzles can be screwed on each of the branches, making a double nozzle.

Price, each \$0.50

Always use a pipe extension and
do your work thoroughly.

SEE LIST ON PAGE 47

SPRAY MATERIALS

For the want of space we only list a few of the materials used in spraying, and only those most popular and effective for all purposes, but we will furnish upon application special circular on the subject of "How, When and What to Spray," containing formulas furnished by the State Board of Horticulture, for the destruction of all the insects and fungi affecting our orchards.

McBAIN'S CARBOLIC COMPOUND

Carbolic Acid has long been recognized as one of the most essential requisites for the destruction of insect life.

To do its work properly and effectually it must be held in solution. McBain's Carbolic Compound does this.

One to three applications at intervals of six weeks are all that is required, the winter spraying will not be needed.

To prepare a spray of McBain's Carbolic Compound requires neither time nor labor. No heating or boiling of water is called for. Dilute forty gallons of cold water with one gallon of the Compound for summer spraying, and twenty-five gallons of water with one of the Compound for winter use. Assimilation of the ingredients is perfect and instantaneous without agitation. No sediment forms and no troublesome clogging of nozzles delays application.

One gal 90c, 5 gals \$4.00.

We are Agents for...

**Dunn's
Solid
Spray.**

Manufactured according to the formulas furnished and recommended by the State Boards of Horticulture of Oregon, Washington and Idaho. Special circular and prices furnished upon application. Thousands are using it with the best possible results in every fruit growing section in the Northwest and California, for scale, aphids, moth and all insects and diseases affecting the orchards.



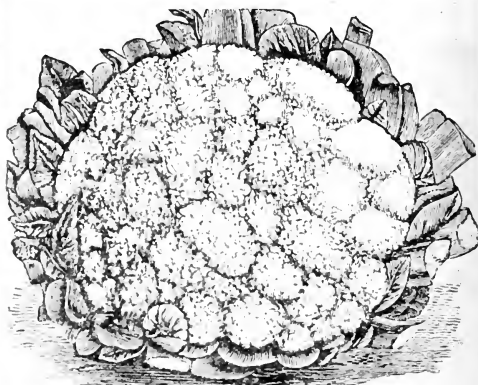
Not a Novelty

ALTHOUGH of recent introduction, it has been thoroughly tested, and has proved to be one of the earliest, sweetest, most tender and beautiful sweet corn ever produced. For market gardeners it is unexcelled, as it is a rapid seller and always brings the best price.

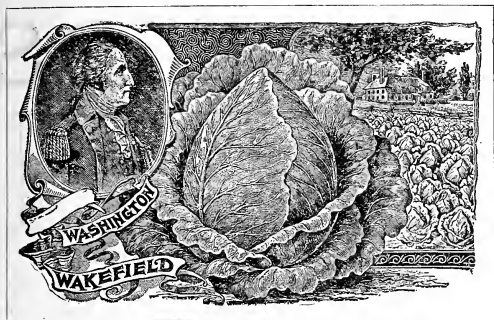
OUR seed is carefully selected from the best Northern Grown strain.

Our New Snowball Cauliflower

THIS is the best strain of "Snow-ball" Cauliflower we have ever offered. Northern grown, from imported seed. Matures earlier and more uniformly than any other stock sold.



Three Excellent Cabbages



First in Head!

First in Market!

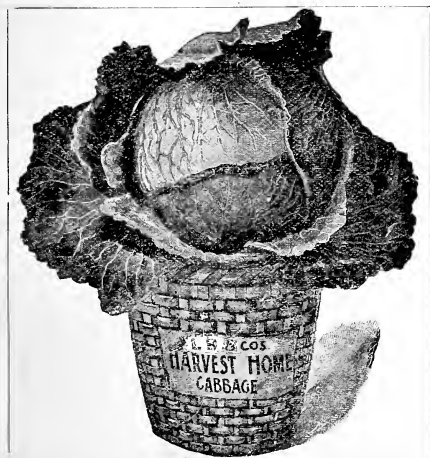
First in the
Hearts of Gardeners!

THE WASHINGTON WAKEFIELD

Cabbage needs but little introduction this season, but we think this is the **surest heading** early and purest strain ever offered.

TRUE HOLLANDER

This is also a well-known variety which undoubtedly stands at the head of winter Cabbages for uniformity and solidity of head. Average weight 8 lbs. per head. None better for kraut.



THE HARVEST HOME...

is one of later production, of most excellent quality. Forms very large solid heads, with few outer leaves. It does not crack, and keeps better than any of the large-headed variety.



OUR



COLLECTIONS

OF

VEGETABLE SEEDS

These Collections will Not be Broken, Nor
the Assortment Changed.

25c

This collection of 10 packages of the standard vegetables will encourage the boys to undertake a little gardening. No better or more profitable employment can be found for them.

The packages are all full size and contain the best new crop of seeds.

The varieties are as follows:

Beet	Water Melon
Cabbage	Onion
Cucumber	Radish
Lettuce	Spinach
Musk Melon	Tomato

Sent postpaid to any address.

No change in varieties will be made.

50c

This most liberal offer will supply a small family with vegetables all summer, if properly handled. The collection consists of one package each of the following 18 varieties:

Beet	Onion, yellow
Cabbage, early	Onion, white
Cabbage, late	Parsnip
Celery	Radish, round
Carrot	Radish, long
Cucumber	Spinach
Lettuce	Squash, early
Musk Melon	Tomato
Water Melon	Turnip

Do not ask for any change.

75c

This collection is unequalled. The 25 packages offered here for 75c will cost you \$1.25 anywhere else, but we make these offers to encourage home gardening.

Asparagus	Musk Melon, late
Beet	Water Melon, early
Cabbage, early	Water Melon, late
Cabbage, late	Onion, yellow
Celery	Onion, white
Carrot	Parsnip
Cucumber, early	Radish, round
Cucumber, late	Radish, long
Corn Salad	Spinach
Cress, or pepper grass	Squash
Lettuce	Tomato
Musk Melon, early	Turnip

Ruta Baga

Delivered free to any address on receipt of price.

\$1.00

The Prize Collection. The most liberal offer ever made, consisting of 30 packages of the best and earliest vegetables. Postpaid for \$1.

Beet, select early sort	Onion, Danvers
Beet, Improved Long Smooth Blood	Onion, Fine Pickling and Table Variety
Beans, Rust Proof	Parsnip, Long Sugar
Cabbage, Standard Early	Parsley, Curled
Cabbage, Mammoth Late Bridgeport Drumhead	Peas, Earliest Variety
Carrot, Best Long Variety	Pepper, Mountain Sweet
Cauliflower, Early Favorite	Radish, Best Turnip Variety
Celery, Improved Golden Heart	Radish, Lady Finger
Corn, Sweet, Best Early Variety	Sage
Cress, Fine Curled or Pepper Grass	Spinach, New Round Leaf
Cucumber, Fine Table Variety	Squash, Select Winter and Fall Variety
Cucumber, Early Cluster	Squash, New Crookneck
Lettuce, Best Head or Cabbage Variety	Turnip, Purple Top
Melon, Musk, True Osage	Turnip, Ruta Baga
Melon, Water, Fine Table Variety	Tomato, Fine Red Variety

POTATOES



PINGREE

EARLY
OHIO

TRIUMPH

BOVEE

SIR
WALTER
RALEIGH

RURAL
NEW
YORKER
No. 2



BURPEE'S
EXTRA
EARLY

UNCLE
SAM

EARLY
ROSE

BURBANKS

GARNET
CHILLI

FAVORITES



We Guarantee Choice Seed Stock at the Lowest Prices.

Our stock is all grown from the most select strain.

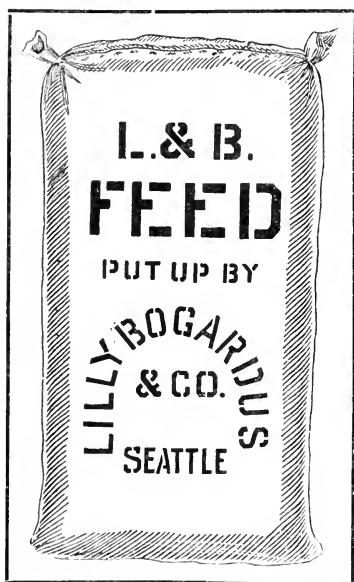
See Page 30

Our Own Brand

The Result of Years of Experience
in the Feed Business ❁ ❁ ❁ ❁ ❁ ❁



The Best bone and
muscle producing
Feed that can be
put up.



Scientifically pre-
pared from care-
fully selected
grains

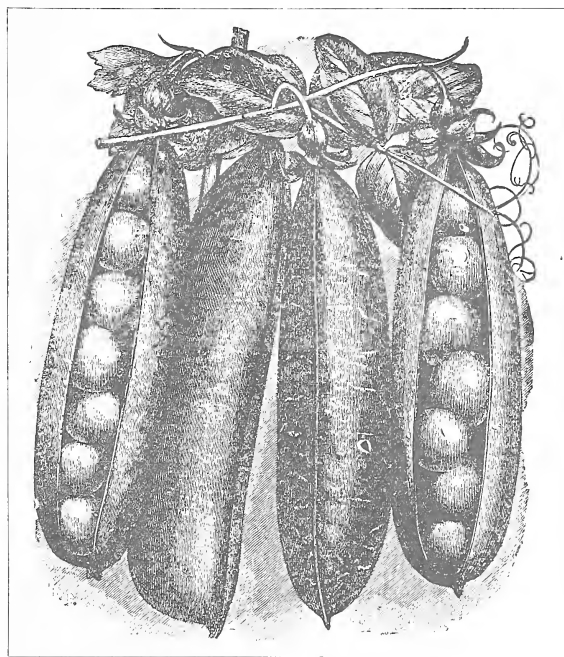


Put up in
90 lb. Sacks

Write for Prices

Our Sales of this Feed have increased
from 1000 to 5000 tons annually for the
past five years.

GRADUS



✦
**EXTRA
EARLY**

✦
**HEAVY
CROP**

✦
**DELICIOUS
FLAVOR**

✦
**LARGE
SIZE**

✦

The Gradus Pea, sold under various names, is undoubtedly the most delicious of the recent productions. It is a large pea, slightly wrinkled, and almost as early as the Extra Early Alaska, First and Best, and other well-known early varieties, all of which are small round peas, bearing only from 5 to 9 peas in each pod, while the **Gradus** pods contain from 7 to 10.

**It excels all others in Earliness, Flavor,
Size of Pods and Peas, and Productiveness**

Large packet, 10c; half pound, 15c; one pound, 20c; seven pound for \$1

Australian Brown Onion



The Only Onion Australian Growers Will Plant

Size
Medium,
Shape
Round,
Color
Brown,
Flavor
Fine,
Yield
Very Heavy.



Keeps Longer
Sells Easier
and for
More
Money
Than
Any Other
Variety
Grown

THE SEED WE OFFER IS AMERICAN GROWN FROM THE ORIGINAL IMPORTATION

Do Not Fail to Try It. You Will Get the Best Price

Packet, 10c; ounce, 20c; quarter pound, 50c; one pound, \$1.75